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# Eastern Europe

## Outlook and Situation Report

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Private farming: Small scale,  
but important, p. 16



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# Summary

**East European grain production in 1984**, forecast at 95 to 100 million tons, may fall slightly short of a year earlier. Oilseed output will remain stable at 4 million tons, and the sugar beet crop is projected to increase 3 million tons to 47 million. Total meat output will be in the vicinity of 11 million tons, down slightly from 1983. Plans for growth in 1984 agricultural production range from zero in Czechoslovakia to 6 percent in Romania. Grain imports will probably remain near last year's total, but purchases of oilseed products should rebound with larger Polish imports. The United States will most likely maintain its 1983 share of the East European market.

Restrictions on imports and investment continued to hinder Eastern Europe's agricultural performance in 1983. In each country, attempts to reduce debt through lower imports and expanded exports were high on the policy agenda. Nevertheless, growth in farm exports was thwarted by a 2- to 3-percent decline in regionwide agricultural output. Only Czechoslovakia and Poland attained better production than in 1982. A prolonged drought mainly hurt the fall-harvested crops. Small grains and rapeseed harvested in the summer fared better than corn, sunflowers, potatoes, and sugar beets.

**Despite the drought**, grain production—estimated at 100 million tons—was only 5 percent below the 1982 record. A decline in corn and barley production was partly offset by a larger wheat crop. Total grain imports were an estimated 8.5 to 9 million tons, more than 2 million less than in 1982. Grain for food is assured until the next harvest, but exports will have to be curtailed in some countries, and imports increased in others, otherwise livestock inventories will need to be reduced.

Total oilseed production, at nearly 4 million tons, roughly equaled the 1982 level. More rapeseed compensated for less sunflowerseed and soybeans. Oilmeal consumption declined last year, but the outlook for 1984 is for a slight increase because of higher imports. Statements from Polish officials indicate large increases in protein meal imports, which should help revive the hog and poultry industries in that country.

**In the livestock sector**, cattle and hog inventories were up 2 percent regionwide last January. Poultry numbers increased 3 percent, and sheep inventories 4 percent. Declines in Poland were more than offset by increases in other countries. Poland's problems in the livestock sector brought regional meat production down an estimated 1 percent to 11.4 million tons last year.

The region's total trade balance improved from 1982. In fact, it had a foreign trade surplus of about \$4.5 billion. All country balances were in surplus except in Bulgaria and Yugoslavia. But even in Yugoslavia, 1982's huge deficit was cut in half in 1983. While the hard-currency component of the region's trade balance greatly improved, debt to the Soviet Union increased.

Regional data for 1983 agricultural trade are still incomplete. However, Poland, the largest importer in the region, reduced its farm trade deficit to about \$240 million, compared with \$2.4 billion in 1981 (Poland's worst agricultural trade year).

**U.S. agricultural exports to Eastern Europe**, at \$899 million in 1983, showed a slight improvement over 1982. Exports to Poland, Hungary, and Yugoslavia were up; sales to the latter two were facilitated by U.S. credit guarantees. The German Democratic Republic, Poland, and Yugoslavia accounted for two-thirds of U.S. agricultural exports to the region. U.S. grain exports declined, but shipments of soybean products and cotton increased considerably. Poland received no U.S. Government credit, but it did receive U.S. food aid worth \$34.4 million in fiscal 1983 and an authorization for \$83.7 million in fiscal 1984.



## AGRICULTURE IN THE ECONOMY

The general economy, deteriorating in the past 3 years because of large debt repayment obligations to foreign creditors, apparently turned around during 1983. During the year, all countries continued their conservative policies of slower economic growth. Restrictions on imports, investments, and consumption were the key elements of economic policy. Debt reschedulings and new loans from the International Monetary Fund (IMF), the USSR, and Western banks relieved some of the financial pressures.

With the help of an economic upturn in Poland, aggregate national income in the region increased 2.5 to 3 percent in 1983. Hungary and Yugoslavia had the slowest growth rates, while the German Democratic Republic (GDR), Poland, and Romania had the fastest. However, the faster growth in the latter three countries was reflected in improved foreign trade balances, rather than better living standards.

Improved industrial production was the main contributor to the growth in national income, because agricultural production declined in all countries except Czechoslovakia and Poland. Poland had the fastest growth rate for industrial output, from its low base in 1982. The growth rate was about 1 percent in Hungary and Yugoslavia.

Gross agricultural production dropped 2 to 3 percent regionwide, as drought-reduced crop production more than offset good performances in several countries' livestock sectors. Gross farm output in Poland, while the highest in the last 4 years, remained lower than in any year from 1973 to 1979.

Plans for 1983 called for stable or lower investments, except in Poland. Preliminary reports indicate that actual investments exceeded the planned amounts.

Agriculture's share in total investments is unlikely to have increased except in Poland. In Poland, agriculture is supposed to get top priority in investment allocation, along with housing, fuel, and other sources of energy. Agriculture in Poland, including the related industries, should receive 29 percent of total investments in 1984.

The agricultural labor force has stabilized in the last few years with a quarter share in the total labor force; however, its share is below the regional average in Czechoslovakia and the GDR. The large outflow of farm labor in the 1970's has temporarily halted because of improved living conditions in the villages and because the capacity of industry to absorb additional workers has declined.

The standard of living deteriorated in most countries, as wage and salary increases did not keep up with rising consumer prices. The decline was probably more serious than the published per capita real income reveals. Yugoslavia experienced the sharpest decline in its standard of living. Its consumer price index was up 58 percent during 1983, and the food component was up 54 percent.

While prices controlled by the governments remained fixed, the goods under price control were in short supply, and people with increased disposable income purchased more of the uncontrolled products or turned to black markets. Shortages were widespread, as evidenced by the rationing of staple food in Poland, by the less comprehensive rationing system in Romania, and by a decree issued in Bulgaria imposing heavy fines on people hoarding flour. (*Thomas A. Vankai*)

## GRAIN AND FEED

### Good Grain Harvest Despite Drought

Total 1983 grain production is estimated at 100 million tons, the second largest crop, but 5 percent below the

Principal plan indicators, Eastern Europe, 1983 and 1984

Item	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia
<i>Percent change</i>							
National income							
1983 plan	3.8	2.0	4.2	0.5-1.0	2-2.5	5.0	1.0
1983 actual	3.0	2.2	4.4	0.4	4-5	3.4	NA
1984 plan	3.8	2.9	4.4	1.5-2.0	2.6	7.3	2.0
Industrial production <sup>1</sup>							
1983 plan	4.8	2.4	3.8	1-2	4	8	2.0
1983 actual	4.6	2.7	4.1	0.7	6.7	4.8	1.3
1984 plan	5.0	2.9	3.6	1.5-2	4.5-5.5	6.7	3.0
Agricultural production							
1983 plan	2.7	2.7	NA	1-2	1.5-2.4	5.1-5.6	2.5
1983 actual	-5.0	2.2	(-2.4)	-3.2	3.6	-2	-2.1
1984 plan	3.1	0	0.6	4-5	1.5-2	5.4-6	2
Capital investment							
1983 plan	-7.0	NA	-10	-10	1.6	0.7	-20
1983 actual	-1.0	1-2	(4)	-5	4.8	2.9	-12.5
1984 plan	1.9	NA	(-10)	-10	-2.8	NA	-10
Per capita real income							
1983 plan	2.8	NA	3	-1-0.5	NA	NA	NA
1983 actual	2.8	1.9	2.3	0	2-3	5.1	-11.8
1984 plan	2.5	NA	2.2	0	2	5.0	NA

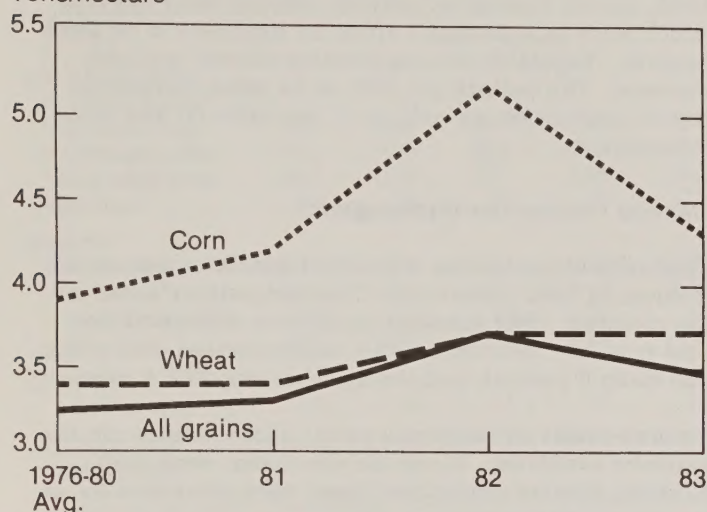
NA = Not available. () = Estimate. <sup>1</sup> Socialized sector only.

Source: State plans and plan fulfillment reports in numerous publications.



## Grain Yields in Eastern Europe

Tons/hectare



1982 record (table 1). Wheat output rose slightly to 34.5 million tons, while coarse grain production fell to 65.6 million, mainly because of reduced corn and barley output in the southern countries where a drought, which was particularly severe during the 1982/83 fall and winter and again in midsummer 1983, reduced yields. Record grain output in the GDR and Czechoslovakia, plus good production in Poland, partially offset declines in the other countries. Lower yields were responsible for 1983's performance, because grain area was up 2 percent from 1982, to the highest area since 1977 (table 2). Yields fell in all countries except Czechoslovakia and Poland.

The mild 1982/83 winter favored winter grain development throughout the region, but spring sown grains suffered in every country. Damage was most severe in the southern countries. Hungarian officials reported the worst drought in over 30 years, although grain production was higher than anticipated (*Vjesnik*, Sept. 23, 1983). They estimate that the total loss in farm output because of the drought nearly equaled the entire planned increase in Hungary's national income (Budapest Domestic Service, Sept. 5, 1983). Extensive irrigation of wheat and barley in Bulgaria (approximately 20 and 11 percent, respectively, of area sown to these crops) likely reduced drought damage (Bulgarian Telegraph Agency, July 26, 1983). Despite claims of the worst drought in 20 years, Bulgaria's grain harvest was 4 percent above the 1976-80 average.

Damage was probably more severe in Romania, where the southern and eastern grain areas were hard hit (*Scinteia*, May 29, 1983). Although 15 to 20 percent of the wheat and corn area had irrigation facilities last year, actual irrigated area was likely smaller because of chronic equipment failures. Official Romanian estimates placed the 1983 crop at least 2.3 million tons (11 percent) below 1982's. Romanian President Ceausescu announced early this year a 1983 grain crop of "around 20 million tons" (*Scinteia*, Dec. 10, 1983). This figure is at least 2 million tons above many Western estimates. This year's harvest is probably not a crop of 20 million tons of usable grain, because the Romanians usually

report production on a bunker-weight basis, with no allowance for foreign matter and excess moisture.

## Procurements Recover in Poland, Yugoslavia

Poland and Yugoslavia are the only countries in the region that depend on State purchases from private producers to meet much of the food, feed, and industrial demand for grain. Following several years of poor grain procurements, Poland should meet its 1983/84 target of 5 million tons, including seed. July-December procurements totaled 4.6 million tons, about 70 percent above a year earlier. Higher grain procurement prices effective July 1, 1983, record rye production (the major grain procured), and lower livestock numbers on private farms contributed to 1983/84's recovery. Procured grain is used mostly for food, and shortfalls have been covered through either imports or diversion of some rye from feed to food use. This year's higher procurements should mean lower grain imports in 1984, but a higher percentage of feed grains in total imports than in previous years.

In Yugoslavia, private-producer sales of wheat are an important source for the milling industry. Attractive 1983 purchase prices and premiums have resulted in record wheat sales—estimated at 3.4 million tons, 600,000 higher than in 1982 and only 200,000 below the procurement target. Therefore, wheat imports in 1984 should be lower than last year.

The situation is the opposite for Yugoslav corn procurements. Officials have fixed the 1983 procurement price for corn below prevailing free market prices; consequently, procurements have suffered. On-farm feeding by small producers has increased, while large livestock and poultry producers, who depend on corn purchased from the State, have threatened to slaughter many of their animals for want of corn. The country's extremely poor foreign exchange position will hardly allow for higher feed imports, even if market supplies do not improve.

## Feed Supplies Tight

Total domestic feed supplies in 1983/84 should be less than in 1982/83. Hay, silage, and other nongrain feeds suffered because of the drought. Only in Czechoslovakia are officials confident that feed supplies, with the exception of corn, will cover both current needs and also allow for stock building (*Hospodarske Noviny*, July 1, 1983). Officials in the GDR are recommending sharper culling of cows in order to hold grain imports to last year's level.

The situation is similar in Poland, although its implications for livestock production are more serious. Unfortunately, the better, but still relatively low, potato harvest, and low hay and root crop yields in 1983 will aggravate an already difficult feed situation. Reductions in an already depleted livestock inventory will be necessary if the country is unable to finance supplemental feed imports. Sales of mixed feed to private farmers during July-December 1983 were 9 percent above the very low levels of a year earlier, indicating only small improvement in supplies. Aside from rudimentary home mixes, these sales are the sole supply of mixed feeds available to private farmers.

Hungarian officials expect only local difficulties with feed supplies and no significant herd drawdowns (*Magyar*



*Hirlap*, Nov. 26, 1983). The situation is worse in Yugoslavia, where the prices paid for ingredients are compounding problems of crop shortfalls. These prices are well below actual farm production costs, resulting in supply shortfalls for mixed feed operations and the closing of several of these plants.

### **Grain Imports Fall**

Grain imports probably fell again last year, to an estimated 8.5 to 9 million tons, from 11.4 million in 1982 (table 3). Imports peaked at 18.8 million tons in 1980. U.S. exports in 1983 totaled 1.6 million tons (1.1 million tons of corn), down from 3.5 million in 1982 and the lowest in more than a decade. The record 1982 grain crop, lower livestock inventories in several countries, competition from other suppliers, and inadequate foreign exchange supplies account for the poor U.S. performance.

Lower livestock numbers have reduced the consumption of mixed feeds in Czechoslovakia (by 230,000 tons according to officials) and the GDR. Additionally, competition from Canada has reduced demand for U.S. corn in the GDR. This trend should continue, as Canada signed a multiyear grain agreement with the GDR in early 1983. The agreement, backed by credit from the Canadian Government, calls for exports of 1 million tons a year through 1986.

Poland, formerly the region's largest importer, continues to import grain well below the levels of just 2 years ago; imports in 1983 were about 3.3 million tons vs 7.8 million in 1980. Prospects for an increase in 1984 are not bright. The recovery in 1983/84 procurements, plus foreign exchange shortages, should limit imports to 3 to 3.2 million tons. Plans to revive poultry production and increased use of rye flour in bread may result in higher corn imports at the expense of wheat.

Total East European grain imports in 1984 should be about 8.5 to 8.8 million tons, and grain exports will be close to 1983's 4 to 4.3 million tons.

### **Drought Affects 1983 Fall-Sown Grain**

Fall sowing of grain was on schedule in 1983 and, except in Yugoslavia, covered or exceeded the planned area. However, the dry weather of early fall hindered germination, especially in Czechoslovakia where 25 to 30 percent of the winter grain had not germinated by mid-January. December precipitation in the GDR, Hungary, Romania, and Yugoslavia helped relieve some of the dryness, and a warm winter across the region resulted in less-than-average winterkill.

The only significant change in fall-sown area was in Yugoslavia, where higher input prices and producer dissatisfaction with official 1984 purchase prices led to a 10- to 12-percent decline in wheat area. A 5-percent increase in corn area sown this spring, however, should offset a large part of the decline in wheat.  
(Robert Cummings)

## **OILSEEDS AND PRODUCTS**

Total 1983 oilseed production was about the same as in 1982, with increases in rapeseed in the northern countries and decreases in soybeans and sunflowerseed in the

southern countries (table 4). Despite the good 1982 oilseed crop, meal consumption continued its decline in 1983, mainly because of sharply reduced meal imports, which were only partially offset by increases in soybean imports. Vegetable oil consumption showed a slight increase. The outlook for 1984 is for some increase in oilseed production, as well as in vegetable oil and meal consumption.

### **Oilseed Production Unchanged**

Total oilseed production was about 4 million tons, roughly equal to 1982 production. The composition, however, has changed: 1983 rapeseed production was up 15 percent from the 1982 crop, while sunflowerseed production was down 9 percent, and the soybean crop fell 4 percent.

Soybean yields suffered as a result of dry weather in the southern countries. Yields for the region were down; however, greater production losses were prevented by an increase in sown area (table 5).

The sunflower crop in Hungary weathered the drought surprisingly well. After Hungarian officials estimated a 14-percent decline at harvest time, production turned out to be 600,000 tons, about the same as last year from a roughly equal area. Romania and Bulgaria were hit harder by the drought. Yields declined slightly in Bulgaria, while they dropped 14 percent in Romania. The Yugoslav crop continued to be affected by phomopsis, a fungal disease. Forced into a longer rotation, the planted area fell from 140,000 hectares in 1982 to 80,000 in 1983. Yields on the reduced area were up, 1.8 tons per hectare from 1.4 in 1982, reflecting progress in combating the disease.

Rapeseed, on the other hand, did exceedingly well, with an average yield of 2.1 tons per hectare, up from 1.8 in 1982. Plantings in Poland were below plan because of dry weather in fall 1982; however, yields were excellent because of favorable weather during the spring. Record yields were also attained in Czechoslovakia and Yugoslavia. Yields in the GDR remained the same as in 1982, but they were still the highest in Eastern Europe.

### **Meal Consumption Continues Its Decline**

Oilseed meal consumption in 1983 declined about 11 percent to 5.9 million tons, about the same rate as in 1982. The decline was caused by a sharp reduction in Polish oilseed meal imports, down from 856,000 tons in 1982 to 399,000 in 1983 (table 6). Meal imports also declined in Czechoslovakia and Romania because of hard currency shortages. The lower regionwide meal imports more than canceled out meal supply increases brought about by larger soybean imports.

Domestic production of soybean meal in Eastern Europe increased about 18 percent in 1983 over 1982. This increase was a result of higher soybean imports by Poland and a good 1982 crop in the southern countries. Polish imports rose from 99,000 tons in 1982 to an estimated 180,000 in 1983. Eastern Europe's production of sunflower meal declined somewhat, but not enough to offset the rise in soybean meal production.

The outlook for 1984 is for a slight increase in meal consumption. With the exception of Poland, no significant



### Oilseed meal utilization<sup>1</sup>, Eastern Europe, 1979-83

Item	1979	1980	1981	1982	1983 <sup>2</sup>
1,000 tons					
Processing from domestic crops <sup>3</sup>					
Soybean meal	299	425	421	346	456
Sunflower meal	614	729	626	719	693
Rapeseed meal	667	325	651	588	553
Fish meal	89	86	82	77	73
Imports					
Oilseed meal	3,971	4,394	4,764	4,008	3,250
Soybeans <sup>4</sup>	639	679	538	442	470
Sunflowerseed <sup>4</sup>	66	27	37	37	15
Fish meal	508	383	309	325	400
Exports					
Oilseed meal	18	29	11	37	10
Apparent meal consumption	6,835	7,019	7,417	6,605	5,900

<sup>1</sup>Including fish meal. <sup>2</sup>Preliminary. <sup>3</sup>Estimated from preceding year's harvest minus exports. <sup>4</sup>Converted to meal equivalent.

Source: Country yearbooks and *FAO Trade Yearbook*.

increases in livestock inventories are planned, so overall meal requirements are not expected to rise much. Poland's meal imports are expected to rise significantly. Because of increased domestic crushing capacity, Romania will likely increase its imports of soybeans while decreasing its meal imports. Meal imports by Yugoslavia and Hungary will probably decline slightly.

### Vegetable Oil Consumption Up Slightly

With the help of higher domestic production, supplies of vegetable oil increased slightly throughout the region in 1983. In Yugoslavia, increases in soybean and rapeseed oil were partially offset by shortfalls in sunflowerseed oil. The major importers of vegetable oil are Yugoslavia, Poland, and the GDR. Imports by Poland and the GDR during 1983 were roughly the same as in 1982, about 125,000 and 100,000 tons, respectively. Yugoslavia, on the other hand, more than doubled its vegetable oil imports, from 79,000 tons in 1982 to about 165,000 in 1983. Of this, 132,000 tons came from the United States, financed by credit from the Commodity Credit Corporation (CCC). Poland bought only 11,000 tons from the United States, while the GDR bought nearly all its vegetable oil from West Germany. Imports of vegetable oil are expected to decline in 1984. However, high soybean imports and the excellent 1983 rapeseed harvest should lead to an increase in supplies.

### Planting Intentions

Significant increases in the rapeseed crop can be expected. The plan in Poland called for 450,000 hectares to be planted to rapeseed. Because of dry weather, the plan was not met; however, it is estimated that a total of 410,000 hectares were planted, which is well above last year's 295,000. No changes have been reported in the GDR's seeding plans. However, recent reports indicate that the rapeseed crop has been wintering well, so it may exceed the 1983 harvest.

The 1984 plan for Yugoslavia calls for 138,000 hectares to be planted to soybeans, up from 100,000 in 1983, and 115,000 hectares to sunflowerseed, up from 80,000. Procurement prices for both oilseeds were raised significant-

ly to induce such increases. Nevertheless, with the disease phomopsis still a threat to the sunflower crop, farmers are unlikely to risk planting such a large area. Consequently, not much increase can be expected in the sunflower area. A disease-resistant strain is expected to be available by 1985, so production may rebound in 1986. A significant increase can be expected in the soybean area, but rises in the costs of inputs have made 1984 soybean prices less attractive. So, area may not reach the planned level. (Nancy Cochrane)

## OTHER CROPS

### Potato Production Steady

Potato production in 1983, at 54 million tons, hardly changed from 1982. Crop shortfalls in many countries were offset by a larger outturn in the region's major producer, Poland. The declines in several countries were attributable mainly to excess precipitation that delayed sowing and, later, to persistent drought. In Poland, the increase in potato production, 2 million tons, was tempered by a Colorado beetle infestation (*Dziennik Ludowy*, May 23, 1983).

About half of the potatoes produced in the GDR and in Poland are used for feed. The decline in the GDR hurts feed supplies; however, food demand for potatoes will be met. In Poland, the State purchases potatoes from farmers for food, industrial, or seed use; only small quantities are purchased for feed use. Procurements in Poland increased 23 percent in 1983, indicating an improved supply to consumers.

### Sugar Beet Production Falls Short

Sugar beet production decreased to 44 million tons, from 50 million in 1982. Total refined sugar production, however, decreased only slightly, from 5.5 million tons in 1982 to 5.4 million. Higher sugar content than in 1982 offset the effect of lower sugar beet production. Because of poor weather, smaller crops occurred in all countries except Poland, where production increased, and Yugoslavia, where the crop remained the same size as in 1982. There were, however, slight cutbacks in the area planted in all countries except Yugoslavia. In Czechoslovakia, almost 10 percent of the crop had to be plowed under because of summer heat and drought damage, and in the GDR, spring planting was delayed because of wet fields.

In the future, Czechoslovakia would like to decrease the area devoted to sugar beets in order to plant more grain, while the GDR would like to increase production in order to cut down on sugar imports. All East European countries currently import raw sugar from Cuba as part of bilateral agreements.

### Tobacco Production Up

Tobacco production in Eastern Europe, at 393,000 tons in 1983, was slightly higher than in 1982. Larger area in Yugoslavia and Bulgaria, the two major producers, chiefly contributed to the increase. Tobacco exports increased an estimated 7 percent from 1982, but imports were up also. Efforts to curb consumption by cigarette price increases and campaigns against smoking were unsuc-



cessful. For the first time, the GDR stressed tobacco production on private plots in order to reduce imports.

Imports from the United States increased to 2,469 tons, up 34 percent from 1982, mainly because of an 850-ton increase in exports to Bulgaria. Several East European countries have obtained licenses (Phillip Morris) and are interested in further western licensing arrangements (Marlboro) to manufacture foreign cigarettes, which could boost U.S. tobacco exports.

### Cotton Production Off

Little cotton is produced in Eastern Europe, and only an estimated 3 percent of total cotton consumption is met from domestic output. All East European countries—including Bulgaria and Yugoslavia, the only cotton producers—are importers. Total seed cotton production in 1983 decreased substantially from 1982's 27,000 tons because of poor weather in Bulgaria. A 750-hectare increase in Yugoslavia's planted area, to 3,000 hectares, partially offset the Bulgarian loss. The USSR remained the main supplier of cotton to Eastern Europe; however, the United States, whose market share was zero in 1982, exported 40,000 tons (\$60 million) of cotton to Yugoslavia through CCC credit. Credit has been announced for cotton exports to Hungary (\$5 million) and Yugoslavia (\$60 million) in fiscal 1984. (Cynthia Taylor)

## LIVESTOCK

Performance in the livestock sector, principally in Poland, Romania, and Yugoslavia, continued to be disappointing in 1983 because of inadequate concentrated feed imports. Low profitability for animal raising—particularly in Poland—and aggressive meat and live animal exports resulted in continued meat rationing in Poland and Romania and chronic shortages in Yugoslavia. Several other countries reported sporadic shortages. Per capita consumption of livestock products changed little last year, and this trend will persist in 1984.

### Animal Numbers Rose; Meat Output Fell

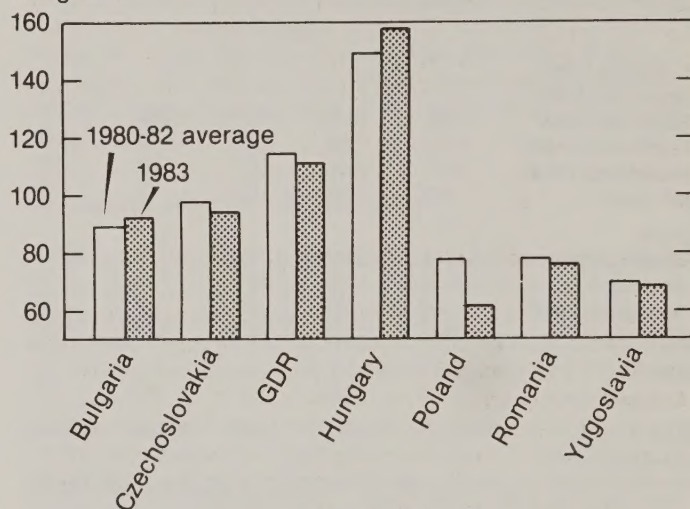
Animal numbers increased slightly last year. Total cattle and cow herds rose almost 2 percent each, and hog and poultry numbers increased 2 and 3 percent, respectively. Sheep numbers were up more than 4 percent (table 7). Changes were uneven in hog inventories; they rose significantly in the GDR, Hungary, and Romania, but fell 10 percent in Poland. Romania reported increases for every major livestock category that were well in excess of any expansion by other countries. However, reports of meat and livestock product shortages and health problems in livestock raising call into question the accuracy of the Romanian numbers.

Meat production fell only in Poland and Yugoslavia during 1983, but the decline in Poland was so large—10 percent—that regionwide output dropped an estimated 1 percent to 11.4 million tons (table 8).

The mild 1982/83 winter and more favorable producer prices in some countries lead to near-record milk production of 43.8 million tons, 5 percent above 1982 output. In Poland, the region's major producer, officials want to replace with dairy products and eggs the protein lost in

## Per Capita Meat Output

Kilograms



the Polish diet because of lower meat consumption (*Rzeczpospolita*, May 12, 1983). Attention will therefore continue to be focused on modernizing Poland's milk industry, which suffers from inadequate milking and refrigeration capacity (*Zycie Warszawy*, Feb. 10, 1984). These inadequacies, plus supply mismanagement, were responsible for the reimposition of butter rationing last October, despite record milk procurements (*Rzeczpospolita*, Jan. 4, 1984).

### Low Profitability Hampers Output In Poland, Yugoslavia

Low profitability is an especially acute problem for livestock producers in Poland and Yugoslavia, and it contributed significantly to last year's drop in meat output and major livestock numbers. The situation is most severe in Poland, where, by the end of 1982, the procurement price for 1 kilogram of slaughter hog covered only 73 percent of the cost of production (*Sztandar Mlodych*, Nov. 16, 1983). Consequently, herd drawdowns for hogs have been so drastic that no recovery in pork output is expected before late this year or early 1985.

Costs are similarly high for Polish cattle breeders. The yearend 1982 procurement price for 1 kilogram of slaughter cattle was 84 percent of the production cost. This, combined with cattle's relatively long breeding period and recent high calf slaughterings, indicates that beef production should not recover until well after profitability is restored. Milk production remains the most profitable livestock enterprise in Poland, and this should guarantee another good year of milk production in 1984.

Polish officials have taken several steps to bolster livestock profitability. Effective January 1, 1984, officials raised guaranteed deliveries of feed concentrates and coal (the latter is used in steaming potatoes that are fed to hogs) for each hog under contract to a state procurement center. Low-interest credit for buying piglets is now available, plus the purchase price of hog breeding stock is subsidized. Last year's relatively favorable crop production has led to a fall in free market prices for grain and potatoes, which should also benefit livestock producers.



Yugoslav meat producers are facing high feed costs, reduced demand at home, depressed world prices, and import barriers by the European Community (EC). Live-stock exporters claim they are unable to buy slaughter animals at prices low enough to compete on world markets, while producers say high feed costs make livestock fattening unprofitable. At home, lower consumer incomes constrained demand for meat sold on the higher priced free market last year, and supplies in state outlets did not cover demand.

### **Meat Consumption Stabilized**

Per capita meat consumption likely changed little last year (table 9). The GDR remained the number-one consumer at 91 kilograms, followed by Czechoslovakia and Hungary. Consumption declined again in Poland; dropping to 57 kilograms, 17 below the 1980 peak. Yugoslavia reports the lowest consumption—55 kilograms per capita. Czechoslovakia and Hungary plan no increase in per capita meat consumption; the GDR has already attained relatively high consumption; and a decline is possible in Yugoslavia. Only Bulgaria appears willing and able to increase consumption.

Rationing remains in force in Poland and Romania for most livestock products. No early end is in sight for meat rationing in Poland, as monthly meat supplies from the State will be an estimated 7 percent less this year than last.

### **Livestock Trade Pattern Unchanged**

Despite domestic shortages, Eastern Europe remains a net exporter of live animals and livestock products. These exports are primarily of high-quality products (canned hams, bacon) to Western markets and are an important source of hard currency for all countries. In 1981 and 1982, Poland and Yugoslavia used their hard currency from these exports to finance a larger amount of lower quality meat imports. Complete data for the region's meat trade are available only through 1982. In that year, exports were 1.1 million tons, similar to earlier years. Imports were 357,000 tons, down slightly from 1981, but well above the 1976-80 average. Romanian exports dropped 34 percent, highlighting the livestock sector's problems in that country.

In 1983, Poland reverted to its traditional position as a net meat exporter, with exports of approximately 100,000 tons and imports of only 50,000. This surplus should not be repeated this year, as imports are planned to double. Slaughter hogs will also be purchased from the GDR for processing in currently underutilized slaughterhouses in western Poland. Most meat imports will be pork and will come mainly from Hungary, the first large-scale imports of meat from that country, and China (Warsaw Home Service, Jan. 18, 1984). Payment will probably be either through barter or convertible currencies.

### **No Growth Expected**

The outlook for 1984 livestock production is for no improvement. Livestock numbers in most countries should remain unchanged or fall. No change is expected in the GDR; Romanian President Ceausescu has called for no increase in hog and poultry numbers; and declines are expected in Hungary and Yugoslavia. Only in Poland

is a significant increase expected, with hog numbers up 1 to 1.5 million head or about 6 to 9 percent (*Trybuna Ludu*, Oct. 29-30, 1983). Meat production should rise slightly this year in all countries except Poland and Yugoslavia; Polish officials forecast a 125,000-ton drop in 1984's meat production (Polish report to the Economic Commission for Europe, March 1984). (*Robert Cummings*)

## **FOREIGN TRADE AND FINANCE**

### **Trade Balance Continues To Improve**

The trade balance of Eastern Europe continued to show strong improvement in 1983. Based on available data, the region likely posted the equivalent of a \$4.5 billion surplus, with exports and imports up 7 and 3 percent, respectively (table 10). The need to service maturing foreign debts without recourse to new loans has forced a large cut in imports; total imports last year, in current prices, were 10 percent less than the 1980 peak (40 and 29 percent lower, respectively, for Poland and Romania). All countries except Czechoslovakia—where the balance remained positive—improved their trade balance. Yugoslavia remains the only country importing well in excess of exports.

Of greater importance to debt servicing than the overall trade balance is the region's balance of convertible currency trade. This balance includes almost all trade with Western nations, plus a portion of trade with countries of the Council for Mutual Economic Assistance (CEMA) and other countries with nonmarket economies. The share of trade conducted in convertible currencies varies greatly; it ranges between approximately 60 percent in Yugoslavia and 20 percent in Bulgaria. Complete data for 1983 are unavailable, but several countries—Czechoslovakia, the GDR, Hungary, and Romania—reported larger convertible currency surpluses than in 1982, while Yugoslavia reported an almost 50-percent decrease in its deficit (*Borba*, Feb. 17, 1984). Import cutbacks—in Bulgaria, Czechoslovakia, and Yugoslavia—plus larger exports for all countries except Bulgaria are responsible for last year's good performance.

The region's balance of trade conducted in nonconvertible currencies, however, continued in deficit. In Yugoslavia, exports fell approximately 12 percent, while imports were down only slightly, leaving that country with a deficit in nonconvertible trade following a surplus in 1982. Poland's trade continued to be in deficit because of a negative trade balance with the Soviet Union, which is expected to continue through the 1980's.

### **Large Drop in Farm Imports**

Although complete data are unavailable, agricultural imports likely remained well below historic levels in 1983, following their sharp decline in 1982. Farm imports in 1982 fell 19 percent to their lowest level since 1978. Because of this drop, 1982's agricultural trade deficit fell from the equivalent of \$4.1 billion in 1981 to \$1.8 billion.

Poland, the region's major importer, continued to cut agricultural purchases in 1983. The value of all farm imports (excluding cotton and fish meal) fell 25 percent while exports rose 27 percent, leaving the country with



an agricultural trade deficit of approximately \$240 million, the lowest in over a decade. The turnaround in farm trade on convertible currencies was even more stunning. The reported deficit was \$120 million in 1983, compared with \$1.8 billion as recently as 1981. Higher-than-expected exports of meat and livestock products, frozen fruit and vegetables, and sugar, coupled with lower-than-planned feed imports, were responsible; purchases of oil meal, fish meal, and chemical feed additives were 26 to 59 percent less than planned (*Zycie Gospodarske*, Feb. 12, 1984).

Hungary, the region's biggest agricultural exporter, took advantage of 1982's generally favorable crop and livestock production to increase exports 7 percent last year (*Magyar Hirlap*, Feb. 4, 1984). The other major exporters—Bulgaria, Romania, and Yugoslavia—also likely posted increases.

The relatively poor agricultural year of 1983 should restrict export growth this year. Nonetheless, Yugoslav farm shipments could benefit from a trade agreement with the EC, which came into force early last year (*Borba*, Feb. 24, 1983). The agreement runs for 5 years and calls for, among other things, lower EC trade restrictions on exports of Yugoslav baby beef, fruit, and some liquors.

### Foreign Debt Increases Slightly

Net hard currency debt in Eastern Europe rose slightly last year to approximately \$72.8 billion. Little new lending occurred in 1983, mostly to Yugoslavia, and the addition of unpaid interest onto the existing debt of Poland and Yugoslavia accounted for almost all of the regional increase. Because of improved hard currency trade balances and low foreign lending, only Hungary, Poland, and Yugoslavia did not reduce their net debt in 1983. Continued declines are almost certain in Bulgaria and Czechoslovakia because of conservative borrowing attitudes; Czechoslovak officials expect to have all of the country's outstanding debt paid off by 1986.

The U.S. Government in early 1984 signed an agreement to reschedule 60 percent of the principal repayments due in 1983 on government-guaranteed credit extended to Romania. In June 1983, bankers rescheduled Romania's commercial debt, postponing almost 70 percent of 1983's principal repayments to 1987-89.

Poland's financial situation remains serious, and rescheduling has become almost an annual event. The country's net debt increased 11 percent to \$26 billion in

1983, mostly because of nonpayments. The 1983 rescheduling for commercial debt was signed in November and covered 95 percent of the principal due on medium- and long-term debt.

Poland has reportedly rescheduled 95 percent of its commercial debt coming due between 1984 and 1987. This is the first multi-year rescheduling for the country and highlights the long-term seriousness of Poland's debt. Under the agreement, interest payments must be kept current, but a significant amount of these payments will be returned to Poland as short-term loans. Payment of the rescheduled principal—estimated at \$7.3 billion—will be due between 1989 and 1994.

No U.S. Government-backed Polish debt has been rescheduled since 1981 because of the sanctions following the imposition of martial law in Poland. However, the U.S. Government announced in October 1983 that it was willing to enter into negotiations with the Polish Government to reschedule U.S.-backed credit to Poland. Talks have been held, but no agreement has been reached. Direct Western government or government-backed credit accounts for about 55 percent of Poland's debt.

Hungary and Yugoslavia used their membership in the IMF to manage their debt more easily. In April 1983, Hungary received a \$100 million short-term loan from the Bank for International Settlements and, in January 1984, received a \$450 million loan from the IMF for balance-of-payments adjustment. In return for IMF assistance, Hungary has agreed to undertake certain changes in economic management. One of these is the devaluation of the national currency, the forint. Between mid-1982 and 1983, the forint was devalued 18 percent against the dollar.

Yugoslavia has reportedly reached an agreement in principle with the IMF on economic reforms that should clear the way for a \$400 million standby loan, plus open the door for negotiations with commercial bankers over repayment of the country's 1984 debt. This assistance is badly needed. Debt service obligations in 1984, including arrearages from last year, are estimated at \$5 billion. Yugoslavia made an estimated \$3 billion in payments on its debt last year, and reached a rescheduling and financing agreement with bank creditors, certain Western governments, and the World Bank.

The IMF agreement will likely result in a further devaluation of the dinar, increased interest rates, and a general decline in consumption throughout the economy. The Yugoslav Federal Government, through its National Bank, also agreed in late 1983 to be the final guarantor of all of the country's debts. This was a major demand of the IMF and should allow the Government to centralize control over contracting new debt.

### Prospects Improved

The worst of Eastern Europe's immediate foreign trade and finance problems should be over. Except in Poland and Yugoslavia, debt reschedulings and current maturity schedules have given the region a few years breathing space. Official policies to maintain trade surpluses in order to provide funds for debt service will continue, but will hold the danger that the region's long-term export

**Estimated net hard currency debt, Eastern Europe, yearend 1981, 1982, and 1983**

Country	1981	1982	1983
<i>Billion dollars</i>			
Bulgaria	2.2	1.7	1.4
Czechoslovakia	3.4	3.3	2.7
GDR	12.3	10.7	9.1
Hungary	7	6.6	6.8
Poland	24.7	23.8	26.4
Romania	9.8	9.4	8.8
Yugoslavia	16.3	16.8	17.6
Total	75.7	72.3	72.8

Source: From the forthcoming article: "Eastern Europe: Facing Up to the Debt Crisis," by R. Miller and D. Barclay in a Joint Economic Committee print assessing the economies of Eastern Europe.



potential may be weakened by deferring needed capital imports. This, combined with the maturity of rescheduled payments later in the decade, could place several countries in a debt crisis situation similar to that of just 2 or 3 years ago. (*Robert Cummings*)

## U.S. AGRICULTURAL TRADE

U.S. agricultural exports to Eastern Europe in 1983, valued at \$899 million, were 3 percent higher than in 1982, but still only 50 percent of the 1981 value (table 11). Lower U.S. agricultural exports to Eastern Europe and higher total imports from the region reduced the U.S. trade surplus to \$128.2 million, down 69 percent from 1982 and the lowest since 1972. However, the agricultural trade surplus, at \$634 million, was little changed from 1983. Estimated transshipments, at \$61 million, accounted for 7 percent of U.S. agricultural exports and were less than one-half the 1981 value. Exports were up to Hungary, Poland, and Yugoslavia, but down substantially to Bulgaria, Czechoslovakia, and the GDR. Agricultural exports to Hungary and Yugoslavia showed marked improvement.

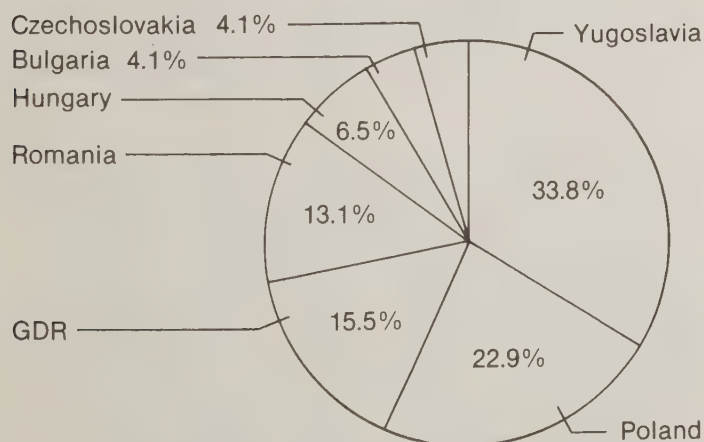
The GDR, Poland, and Yugoslavia received over two-thirds of U.S. agricultural exports. Yugoslavia, our largest customer in 1983, accounted for over one-third of total U.S. agricultural exports to this region. Poland still retained its relative share, but moved from third to second place. The GDR, our largest customer in 1982, dropped to third place.

Of total U.S. exports to Eastern Europe, agriculture's share was 60 percent last year, close to 1982 but below historical levels. A substantial drop in the share of farm products in total exports to Czechoslovakia was offset by a large increase for shipments to Hungary and Yugoslavia, the only two countries receiving CCC credit.

### Exports Decline; Cotton and Vegetable Oil Shipments Improve

In 1983, the United States exported 1.6 million tons of grain (valued at \$222 million) to Eastern Europe, down

**Individual Country Shares of U.S. Agricultural Exports to Eastern Europe, 1983**



Source: Bureau of the Census, U.S. Department of Commerce; U.S. Export Sales, Foreign Agricultural Service, USDA.

**Agriculture's share of total U.S. exports to Eastern Europe, 1978-83**

Country	1978	1979	1980	1981	1982	1983
Percent						
Bulgaria	83.0	72.6	80.6	79.1	60.1	56.7
Czechoslovakia	75.4	92.1	87.0	75.1	80.8	50.4
GDR	92.6	95.1	95.5	96.7	92.1	94.6
Hungary	53.9	34.0	37.7	16.6	10.5	52.9
Poland	74.8	82.6	81.4	87.2	61.8	64.1
Romania	47.4	67.8	65.4	75.3	59.8	63.6
Yugoslavia	23.4	40.7	38.0	22.6	32.8	50.4
Eastern Europe	57.8	69.8	69.4	66.5	55.0	59.7

Source: Bureau of the Census, U.S. Dept. of Commerce.

53 percent from 1982 and 78 percent from 1981 (table 12). Corn exports fell to 1.1 million tons (\$139.5 million), down from 3.2 million tons in 1982. Wheat exports, showing some improvement, increased to 385,000 tons (\$61 million), from 334,000 in 1982.

The U.S. share in total East European grain imports probably declined further, down from 31 percent in 1982 and an average 45 percent during 1976-80. The 70-percent market share of corn imports in 1982 also likely decreased. U.S. wheat showed some slight improvement from 1982's 6-percent share, but it was still far below the 28-percent average during 1976-80.

Soybean exports increased to 720,000 tons (\$181 million) in 1983, up from 546,000 tons in 1982, with expanded shipments to Poland, Romania, and Yugoslavia. Soybean meal and cake exports also improved, rising to 755,000 tons (\$174.7 million), compared with 524,000 tons in 1982. Exports decreased to Bulgaria, Czechoslovakia, the GDR, and Romania, but they improved significantly to Yugoslavia, Poland, and especially Hungary, which imported no U.S. soybean meal and cake in 1982. Nevertheless, exports were still down 56 percent from the peak year of 1980.

Vegetable oil exports, at 143,000 tons (\$63 million), were up fivefold from 1982. Exports to Poland, a major importer, remained on the 1982 level; however, shipments to Yugoslavia increased to 132,000 tons.

Cotton exports, at 2,000 tons in 1982, increased to 47,000 tons (\$82.6 million), with Yugoslavia the only importer. U.S. exports of cattle hides remained at 1982's 2.5 million pieces (\$78 million), with greater exports to Czechoslovakia and Romania and much less to Poland.

U.S. agricultural imports from Eastern Europe increased to \$264 million in 1983, up from \$228 million in 1982 (table 13). The value of imports of processed meat, primarily canned ham, increased 16 percent and accounted for 60 percent of agricultural purchases. The increase was largest for Poland. Imports of other products from Poland, as well as from Bulgaria, Hungary, and Romania, also increased. Other products,—valued individually at \$5 million or more—included feathers and down, cheese, wine, tobacco, and hops, and accounted for 29 percent of total U.S. agricultural imports from Eastern Europe.

### CCC Credit and Food Aid

A special article in this report covers East European participation in CCC's commercial Commodity Export Pro-



### U.S. food aid to Poland, fiscal 1983 and 1984

Commodity	FY1983		FY1984	
	P.L. 480 Title II	Section 416	P.L. 480 Title II	Section 416
	Tons			
Wheat flour	42,139	0	32,484	0
Dried milk	16,537	960	0	12,274
Butter	13,593	960	0	31,500
Vegetable oil	10,784	0	9,873	0
Cheese	8,924	960	0	2,580
Corn soy blend	6,805	0	0	0
Rice	6,093	0	7,970	0
Rolled oats	4,219	0	1,500	0
Corn soya milk	2,269	0	0	0
Soy blend	488	0	0	0
Dried peas	71	0	0	0
Butter oil	0	1,470	0	1,320

Source: FAS/USDA.

gram. The United States also provided food aid to the Polish people last year under Title II of P.L. 480 and Section 416 of the Overseas Dairy Donation Program. In fiscal 1983, food aid amounted to \$28.4 million under P.L. 480 and \$5.9 million (market value) under Section 416. The authorization for fiscal 1984 amounts to \$22.4 million under P.L. 480 and \$61.34 million under Section 416. The food aid is distributed by four private voluntary organizations: CARE, Catholic Relief Service, Food for Poland, and World Vision. (*Cynthia Taylor*)

## INVESTMENT AND INPUTS

After sharp declines in 1982's agricultural investment everywhere except Czechoslovakia, investment in 1983 showed some recovery. There were increases in the GDR, Czechoslovakia, Romania, and Poland, and declines in Bulgaria, Hungary, and Yugoslavia. The decline in agricultural investment was most severe in Yugoslavia, where overall investment fell 12.5 percent. Agriculture's share probably remained constant at around 6 to 7 percent. The share of agriculture in total investment remained fairly steady, ranging from the 6 percent in Yugoslavia to 17 percent in Romania. Plans for agricultural investment in 1984 are for slight increases, except in Yugoslavia and Hungary, where further declines are projected.

### Fertilizer Use Unchanged

Fertilizer use in 1983, measured in active ingredients, is estimated at 209 kilograms per hectare in Eastern Europe, essentially unchanged from 1982. Use was up 2 percent in Yugoslavia, 4 percent in Czechoslovakia, and 7 percent in Romania. There was very little change in the GDR, Hungary, and Bulgaria, while Poland showed a 5-percent decline. Overall use was still below that of 1980 and 1981.

All the East European countries except Poland and Yugoslavia are net exporters of nitrogen fertilizers. The GDR and Romania are net exporters of all fertilizers; the rest import significant quantities of phosphorous and potassium fertilizers. All countries are net importers of the necessary raw materials—natural gas, phosphate rock and, except for the GDR, potash. Fertilizer use in

these countries has been constrained by pressures to increase exports and decrease imports. Increases in production in most countries have been exported rather than consumed domestically in order to increase hard currency earnings. Romania, for example, exports well over half its mineral fertilizer production, while at the same time having one of the lowest application rates in Eastern Europe.

Higher fertilizer use in Yugoslavia was helped by increased domestic production of nitrogen and phosphate fertilizers and higher imports of potash and phosphate rock. Nevertheless, imports of nitrogen fertilizer have fallen considerably, and there have been reports of shortages for 1984 spring planting. The Polish Government has also made efforts to increase fertilizer exports while constraining domestic demand by steep price increases. Thus, there seems to be little hope for further increases in availability in either country, and consumption will likely remain below 1981 levels.

The outlook for 1984 is for a slight increase in fertilizer consumption. Bulgaria plans a rise of 6 percent in nitrogen fertilizer deliveries to farms and 10 percent in deliveries of phosphorous and potassium fertilizers. Czechoslovakia and Hungary will most likely see slight increases. Prices in the GDR and Yugoslavia have increased sharply—60 and nearly 100 percent, respectively. Thus, increases in consumption will at best be minimal in those countries. Poland is planning an 8-percent increase in consumption. It is doubtful that the target will be met. In fact, the lack of increase in fertilizer consumption in most countries is not a serious problem. There have been reports from the GDR, Czechoslovakia, and Hungary of overuse of fertilizer, particularly nitrogen.

### Plant Protection Agents in Short Supply

A real problem throughout the region is a shortage of plant protection agents; the total supply of which is more dependent on imports than that of fertilizers. Czechoslovakia, for example, produces the plant protection agents needed for grains, but it has to import the ingredients and also has to import the agents used on oilseeds. Czech imports of these materials from the West come to \$20 million a year. Reportedly, for some agents, only 30 to 40 percent of the needs are met (*Agrochemia*, No. 5, 1983). In Yugoslavia, the situation is similar.

### Fertilizer use in Eastern Europe<sup>1</sup>, 1975 and 1980-1983

Country	1975	1980	1981	1982	1983 <sup>2</sup>
Kilogram/hectare arable land					
Bulgaria	157	199	250	250	250
Czechoslovakia	295	336	344	321	333
GDR	370	326	344	281	278
Hungary	276	262	278	288	290
Poland	236	244	235	226	215
Romania	88	113	103	102	109
Yugoslavia	90	105	128	123	126
Eastern Europe	199	212	219	208	209

<sup>1</sup>Nitrogen, phosphate, and potassium in nutrients. <sup>2</sup>Estimate.

Source: Statistical yearbooks of respective countries.



**Tractor and grain combine numbers (January 1)**

Country	Tractors			Grain combines		
	1981	1982	1983	1981	1982	1983
	1,000 units					
Bulgaria	153	152	152	10	10	9
Czechoslovakia	137	134	132	18	18	18
GDR	145	147	150	14	14	15
Hungary	55	55	55	14	13	13
Poland	619	655	694	39	43	46
Romania <sup>1</sup>	147	156	169	39	44	48
Yugoslavia <sup>2</sup>	416	596	622	9	9	9
Total	1,672	1,895	1,974	143	151	158

<sup>1</sup>Self propelled combines only. <sup>2</sup>All types of combines.

Sources: Country yearbooks.

### **Farm Machinery: Numbers Up, But Problems Remain**

The trend throughout Eastern Europe has been a steady increase in both numbers and horsepower of tractors and combines. This trend most likely continued in 1983. Most countries have consistently reported increases in deliveries to farms.

Underneath these trends lie several problems that indicate a slightly less sanguine situation. State deliveries to farms, while slowly increasing, are often late or below planned levels. A report from Czechoslovakia complained of delays in fall planting resulting from late deliveries. Therefore, 20 to 30 percent of the winter wheat was emerging late, and some land would have to be resown in the spring (*Hospodarske Noviny*, Feb. 4, 1983).

Machinery imports are also frequently less than planned. Hungary reported that in 1983 only two-thirds of the tractors that were contracted for with the Soviet Union and Czechoslovakia were actually delivered (*Muszaki Elet*, Aug. 4, 1983).

One reason tractor numbers continue high in most countries despite late or below-plan deliveries is that many are kept in use long after their value has depreciated to zero. In Hungary, for example, 45 percent of the tractors and 28 percent of the combines had zero book value in 1982 and should have been replaced. Furthermore, a tractor there typically gets 2,000 hours of use a year, versus 800 hours in the United States (*Magyar Hirlap*, July 14, 1983). Other problems frequently noted include chronic shortages of spare parts; inadequate storage facilities, so that tractors are often kept out in the open; and a lack of trained operators.

### **Irrigation Expanding Very Slowly**

The area under irrigation is slowly expanding. However, many projects are behind schedule, and progress is limited by overall constraints on investment. Irrigation is acknowledged to be inadequate nearly everywhere. Arable land covered by irrigation ranges from less than 2 percent in Yugoslavia to 28 percent in Bulgaria.

The return on investment seems to be disappointing, even in those countries where irrigation is more extensive. In Romania, much of the irrigation equipment is in disrepair, and much of the capacity is unusable because of silting. Consequently, despite a 20-percent area under

irrigation, Romanian crops suffered considerably during last year's drought. Bulgaria fared somewhat better; however, there have been complaints in the press that corn and wheat yields on irrigated land were less than expected. (*Nancy Cochrane*)

## **AGRICULTURAL POLICIES**

Agricultural policies in Eastern Europe continued to favor import substitution and, in the southern countries, higher farm exports. Changes in producer and consumer prices were used to achieve these policies. Hard currency shortages and credit restrictions from the West helped shift some trade to CEMA countries. This shift from the West to East is generally viewed as temporary and not as a step toward isolation. The region remains interested imports of high technology products and contact with capitalist markets.

Long-planned economic integration among CEMA members, however, has been slow. The economic policy of CEMA members revolves around the objective of harmonizing state planning, decentralized economic control, and independent enterprise management. The differing emphasis between rigid plan enforcement and management freedom distinguishes the countries from each other.

### **CEMA Cooperation Discussed; Summit Planned**

The agricultural policies of CEMA members are coordinated by an intergovernmental committee, which held its 37th meeting in October in East Berlin. The principal proposals at the meeting included promotion of barter trade and additional efforts for energy and raw material conservation. These proposals were obviously generated by the difficulty in obtaining import financing from the West and the growing cost of oil and mineral extraction in the Soviet Union, which the East Europeans help finance in return for guaranteed energy supplies.

Recently, the need for regionwide planning and joint investment in agriculture received as much attention as the energy supply. During the East Berlin meeting, the Bulgarian Chairman of Ministers, Grisha Filipov, mentioned that the further increase in production capacity of agricultural land and the provision of additional food is just as expensive as energy production. Accordingly, the pooling of investment in agriculture and the food industry is just as important as in the exploitation of energy (*Rabotnichesko Delo*, Oct. 19, 1983). The Hungarian



delegate also emphasized the capital intensiveness of modern agriculture and the food industry and pleaded for industrial support and well organized joint research (*Nepszabadsag*, Oct. 19, 1983).

Eastern Europe's precarious financial and trade situation should be high on the agenda of the much-postponed summit meeting of CEMA members, which is now scheduled for June. The Soviet Union will likely push for more imports from individual East European countries to balance its bilateral trade. The East Europeans may bargain for higher raw material and energy supplies and increased prices for their finished-product exports to offset the rising cost of oil and gas from the Soviet Union.

Other important issues will be attempts to raise agricultural output and a reexamination of economic cooperation and plan coordination among CEMA members. This may be discussed in connection with East European cooperation in implementing the Soviet Union's Food Program, which is designed to raise farm output and food supplies in the USSR. Several Czechoslovak firms have already signed contracts to supply fertilizer plants and machinery to the Soviet Union, and Hungarian officials anticipate higher exports of food-processing equipment and crop-raising technology as the Food Program proceeds.

### ***Producer Prices Raised***

East European authorities have raised procurement prices in order to stimulate production. To uphold profitability despite diminishing subsidies, procurement price increases were steeper than in previous years. Generally, crop prices were increased proportionately more than livestock prices to discourage the fast expansion of livestock output without an adequate feed base.

In Poland, this price policy induced farmers to step up grain deliveries to the State, but it lowered livestock holdings, threatening the meat supply in 1984. As of July 1983, Polish wheat prices were increased 34 percent, young cattle prices 20 percent, and hog prices 8 percent. Milk prices were raised least, so as to influence a shift from dairy farming to beef cattle.

In Czechoslovakia, producer prices for crops were increased an average of 6.4 percent. In Hungary, all agricultural procurement prices were raised an average of 4.4 percent. Among the inputs, fertilizer prices in Hungary were hiked 16 percent, small machinery 12 percent, and protein meal 8 percent. The GDR announced a dramatic 50- to 60-percent procurement price increase. The price rise in the GDR is described as the steepest within the 35-year existence of the country.

Yugoslavia unsuccessfully fought its spiraling inflation with a general price freeze. This freeze, in effect for a year, was selectively and gradually lifted beginning in August. Prices, however, had been creeping upward throughout the year despite the freeze, and they erupted following the relaxation of controls. Subsequently, the freeze was reinstated at the end of December.

### ***Demand Suppressed***

Restrictions on demand to foster self-sufficiency were twofold. Higher retail prices reduced demand, and shortages or ration coupons limited the availability of food.

Hungary opted for price increases. Poland and Yugoslavia increased prices and rationed selected foods. Romania allowed shortages and used rationing in some counties to equalize distribution. Bulgaria, Czechoslovakia, and the GDR continued heavy food price subsidies.

Food price increases were the highest—an average 54 percent—in Yugoslavia. In Hungary, the increases ranged from 10 to 23 percent. Bread, cooking oil, and sugar prices were raised in September, and meat prices in January 1984. Poultry prices were raised only 10 percent because of export difficulties; beef prices were increased the most. After long deliberation and public discussion, average food prices in Poland were increased only 10 percent in January 1984, less than anticipated, and these prices were accepted by the population without violent objection. (*Thomas A. Vankai*)

## **OUTLOOK FOR 1984**

Official plans, investment data, crop development, livestock inventories at the beginning of the year, and available feed reserves are the principal bases for forecasting crop and livestock output. Aggregate agricultural growth plans for 1984 range from no growth in Czechoslovakia to 6 percent in Romania. In Czechoslovakia, the GDR, and Hungary, the planned 5- to 10-percent increase in crop production should be canceled out by declines in the livestock sector. In the other four countries, plans call for more equal growth rates for crops and livestock.

Annual production plans always take into account the preceding year's performance. Planners expect faster growth after a poor year than after a good one. However, the modest plans for 1984 also consider current austerity measures that impose restrictions on investment and imports in all sectors of the economy.

While the largest net importers of agricultural commodities, the GDR and Poland, strive for higher self-sufficiency ratios, the southern countries wish to enlarge their agricultural trade surplus. Because of a general lack of investment funds, production growth must be generated through better mobilization of domestic resources, improved management efficiency, and higher productivity.

### ***Investments and Inputs***

Bulgaria, the GDR, and Romania will continue to emphasize expanded irrigation. The Bulgarian plan calls for irrigation facilities on an additional 30,000 hectares. In the GDR, irrigation equipment should be repaired or installed on 156,000 hectares, and local authorities are urged to help urban gardeners install irrigation facilities. The Romanians have an irrigation target of 385,000 hectares for 1985.

Plans in Bulgaria call for a 6- to 10-percent increase in fertilizer application, and Romanian plans also include a significant rise. Polish authorities hope that their private farmers will step up fertilizer purchases because procurement price increases have raised the profitability of crop production. The output of fertilizers, plant protection agents, and farm machinery has increased in Poland, assuring higher market supplies.



## Crops

Grain production remains a top priority. In 1983, the region as a whole was short 4 to 5 million tons of grain at its current level of livestock inventory. This deficit could be erased and the region would be a surplus producer, if the ambitious plans for 1984 are realized and grain production hits 116.7 million tons. The planned grain production exceeds by 11 million tons the record output attained in 1982. This achievement, however, would be possible only under optimal weather, and in Romania, the 29-million-ton goal is not realistic under any circumstances.

In fact, below-optimal development of fall-sown grains is already an impediment to achieving the planned record output. The soil was generally too dry at sowing; germination was spotty; and plant growth was weak at the onset of winter. However, winterkill was below average. The sown area is larger than last year in Hungary and Poland, but smaller in Yugoslavia. Spring sowing was delayed by frosts in the GDR and by excessive precipitation in Bulgaria and Romania. Czechoslovakia, Hungary, and Poland continue to suffer from soil moisture deficiency.

The southern countries plan to expand corn area. The weather and a timely harvest of small grains permitting, Romania plans to seed 600,000 hectares of corn as a second crop. Should this corn ripen, it would add significantly to output; however, second corn crops have had very limited success so far. Thus, under present circumstances, grain production in 1984 is more likely to be about 95 to 100 million tons.

Yield increases are anticipated for all field crops. Next to grains, Bulgarian plans call for an above-average growth rate in sunflower, sugar beet, tobacco, vegetable, and grape production. In Czechoslovakia, the focus is on rapeseed, sugar beets, pulses, hops, fruit, and vegetables; in the GDR it is on potatoes, sugar beets, forage, fruit, and vegetables. The Hungarians plan to extend oilseed area 2.5 percent, and oilseed production is slated to increase 8 to 9 percent. Potato and sugar beet production is aimed at assuring self-sufficiency for direct food consumption.

The Poles hope for better rapeseed and potato crops than in 1983. In Romania, yields of all industrial crops, sugar beets, potatoes, pulses, vineyards, and orchards are expected to be larger than in 1983. The Yugoslav target of 8 million tons of sugar beets is probably out of reach.

**Grain production plans for 1984**

Country	Plan
	<i>Million tons</i>
Bulgaria	10.0
Czechoslovakia	11.0
GDR	10.5
Hungary	15.0
Poland	22.2
Romania	29.0
Yugoslavia	19.0
Total	116.7

Source: Economic plans for 1984 of the various countries.

Output of oilseeds may exceed 4 million tons, and an average sugar beet outturn of 47 million is likely.

## Livestock

Growth in livestock production is planned in conjunction with anticipated domestic feed production and imports, which are limited by hard currency shortages. Officials are urging producers to shift from hog and poultry breeding to cattle and sheep, animals which rely less on concentrated feed. Poland and Bulgaria are exceptions to this policy. In Poland, hog and poultry inventories are so depleted that stock rebuilding is a high priority. In Bulgaria, a substantial planned increase in per capita meat consumption predetermines increased hog and poultry stock.

In Czechoslovakia, a reduction of 80,000 hogs is anticipated because the 1983 drought reduced corn, sugar beet, and forage production and the Government is reluctant to replace the loss with additional grain imports. It is likely that hog and poultry numbers will decline in the GDR and Hungary, where inventories in 1983 reached records. Excess slaughter in some countries is most likely to offset meat production declines in Poland and Yugoslavia. Total production in the vicinity of 11 million tons is anticipated in 1984.

## Agricultural Trade

The southern countries' agricultural trade is expected to be positive or nearly in balance. The reduced grain and sugar beet harvests in 1983, however, will trim the trade surpluses of Hungary and Bulgaria and impose sacrifices on Romanian consumers to maintain exports.

The USDA forecast of 8.5 to 9 million tons of East European grain imports (4 million wheat, 5 million coarse grains) in 1984 is about equal to the reduced volume in 1983. Oilseed meal imports could rebound to 4.5 million tons, if Poland triples 1983 imports to 1.2 million, as planned, to help rebuild the hog and poultry industries.

East European grain exports may exceed 4 million tons. Exports of livestock and products will continue, even if domestic meat shortages persist. Higher value exports of processed meat from Poland are expected to compensate for the planned 100,000 tons of lower quality raw meat to be imported. Yugoslav plans call for an 18-percent increase in meat exports for hard currency and a 23-percent rise on bilateral clearing accounts, an overly optimistic goal. Foreign demand for Hungarian poultry has eased; thus, no growth in poultry exports is anticipated.

## U.S. Export Prospects

U.S. agricultural exports to the region, of which usually more than 80 percent of the value derives from grain and oilseed products, are forecast to increase to \$890 million in fiscal 1984 from \$827 million in fiscal 1983. CCC credit has been slightly reduced for fiscal 1984, and none has been granted to Poland and Romania—considerable credit recipients in the 1970's. Lower demand, intensified competition from other suppliers, and the East European hard currency shortage will for several years prevent the United States from reaching the \$1.6 billion annual export average of 1976-81. (Thomas Vankai)



# CCC Credit For Eastern Europe

Cynthia Taylor

**Abstract:** The Commodity Credit Corporation's (CCC) Commodity Export Program has been instrumental in the expansion of U.S. agricultural trade with Eastern Europe. Currently, only Romania, Hungary, and Yugoslavia are eligible for CCC credit under the commercial segment of this program. Poland, the largest recipient in Eastern Europe, has not been considered for credit since 1981. Poland and Romania are in arrears and have had their repayments rescheduled.

**Keywords:** Commodity Credit Corporation, Commodity Export Program, CCC credit, Export Credit Sales Program, Export Credit Guarantee Program, Blended Credit Program.

The CCC, a wholly-owned U.S. Government corporation since 1933, offers a Commodity Export Program to foster the sale of U.S. agricultural products. The commercial segment of the CCC's Commodity Export Program has been beneficial in the promotion of U.S. agricultural trade with Eastern Europe<sup>1</sup>. While CCC programs have financed only about 3 percent of total U.S. agricultural exports, they have supported about one-quarter of the shipments to Eastern Europe. Eastern Europe's share in total CCC-financed exports varied annually; for example, it accounted for 26 percent in 1971 and peaked at 45 percent in 1980.

## The Commodity Export Program

The Commodity Export Program helps U.S. agricultural exporters create new markets and preserve, increase, or prevent a decline in already existing markets. It also helps developing countries shift from concessionary to commercial financing and enables U.S. firms to compete with exports from other countries—especially subsidized exports. The Commodity Export Program achieves these goals through the offering of short and intermediate term credit—6 months to 10 years—so that foreign buyers can avail themselves of U.S. agricultural goods. Credit periods, however, are typically 3 years in length.

The commercial segment of the Commodity Export Program is composed of three programs, the Export Credit Sales Program (direct credit), the Export Credit Guarantee Program (guaranteed credit), and the Blended Credit Program (direct and guaranteed credit). The Export Credit Sales Program involves direct credit from the CCC to foreign buyers to enable them to purchase eligible U.S. agricultural commodities. Under the Export Credit Guarantee Program, the CCC guarantees repayment of

<sup>1</sup>The East European countries are generally not eligible for financing under P.L. 480, Title I of the concessionary segment of the Commodity Export Program because of their relatively advanced economic development and because of the friendly country requirement (determined by the Secretary of State). However, at various times, several East European countries have received Title I financing when a need for assistance was demonstrated. Poland, Romania, Yugoslavia, Czechoslovakia, and Hungary have received humanitarian food aid under Title II of P.L. 480.

**U.S. farm exports and CCC credit to Hungary, Poland, Romania, and Yugoslavia, selected fiscal year averages and fiscal 1980-83 annual**

Fiscal year <sup>1</sup>	Hungary			Poland			Romania			Yugoslavia		
	U.S. farm exports	CCC credit <sup>2</sup>	CCC share	U.S. farm exports	CCC credit <sup>2</sup>	CCC share	U.S. farm exports	CCC credit <sup>2</sup>	CCC share	U.S. farm exports	CCC credit <sup>2</sup>	CCC share
	Million dollars	Percent		Million dollars	Percent		Million dollars	Percent		Million dollars	Percent	
1963-1964	12.4	0	0	107.7	8.1	8	.1	0	0	96.3	0	0
1965-1969	6.9	0.9	13	48.6	15.5	32	3.3	0	0	71.4	7.9	11
1970-1974	19.5	0.3	2	134.3	29.7	22	52.2	15.8	30	83.8	26.1	31
1975-1979	35.5	3.2	9	434.0	258.5	60	176.4	41.9	24	101.1	35.1	35
1980	40.5	0	0	676.9	562.9	83	496.6	25.0	5	333.2	54.9	16
1981	8.5	0	0	700.0	<sup>3</sup> 670.8	96	477.0	<sup>3</sup> 50.0	10	203.9	22.3	11
1982	11.4	0	0	181.4	0	0	135.7	0	0	178.9	0	0
1983	49.0	42.0	86	231.9	0	0	115.0	0	0	249.3	235.0	94

<sup>1</sup>July-June from 1963 to 1977, October-September from 1978. <sup>2</sup>Includes financing under the commercial segment of the Commodity Export Program only. <sup>3</sup>All credit was used in fiscal 1981, but a shipping extension was granted for Polish and Romanian corn purchases, resulting in in \$25.2 and \$23.9 million of corn, respectively, being shipped in the first quarter of fiscal 1982. These shipments were recorded as exports in fiscal 1982.

Sources: Bureau of the Census, U.S. Dept. of Commerce; FAS/USDA.



export-financing credit made to foreign buyers by U.S. institutions.

The Blended Credit Program, available since fiscal 1983, is a combination of both the Export Credit Sales Program and the Export Credit Guarantee Program; the direct credit portion is interest free. If for any reason a recipient is unable to adhere to its obligation, the CCC is liable for the entire amount of direct credit. The CCC guarantees 98 percent of the principal and up to an 8-percent interest rate on guaranteed credit. Currently, the amounts of direct and guaranteed credit are negotiated for each transaction under the Blended Credit Program, with the interest-free portion not exceeding 20 percent of the total.

### Commodity Eligibility

Originally, only CCC commodity inventories and commodities covered under CCC price support programs were eligible for CCC export financing. Currently, all farm commodities are eligible for consideration, including those held in private stocks and those purchased from the CCC. Decisions on country and commodity financing are made annually by the CCC, which takes into account requests from foreign governments, country financial standing, commodity market importance, U.S. stocks, requests from U.S. cooperatives and exporters, and other political and economic considerations.

### Country Eligibility

At present, East European country eligibility for CCC credit financing is restricted by Section 402 of the Trade Act of 1974, which provides that certain countries with nonmarket economies are not eligible for most-favored-nation (MFN) import tariff status, CCC credit programs, and Eximbank financing unless the President (1) determines that the country does not impede emigration or (2) waives this determination under other sections that give some flexibility to the President in promoting the freedom-of-emigration requirement.

Waivers, issued annually, first made Romania in 1975 and Hungary in 1978 eligible to receive CCC credit. Poland and Yugoslavia, by virtue of their eligibility for MFN status when the Trade Act became law, were exempt from Section 402. Poland, however, is no longer considered for CCC credit financing because of a U.S. decision made in response to the imposition of martial law in December 1981. Although martial law has been rescinded, two other criteria for renewed consideration—a dialogue between the labor movement and the State and a release of all political prisoners—have not yet been met.

### East European Participation

CCC credit in support of U.S. agricultural exports to Eastern Europe amounted to an average \$8.1 million during fiscal 1963 and 1964, \$26.1 million during fiscal 1965-69, and \$75.1 million during fiscal 1970-74. Total East European use of CCC credit accelerated after fiscal 1974, averaging \$299 million during fiscal 1975-79, \$643 million in fiscal 1980, and peaking at \$743 million in fiscal 1981. During fiscal 1980 and 1981, Poland accounted for 88 and 93 percent, respectively, of the credit extended

**U.S. farm exports to Eastern Europe and CCC credit, selected fiscal year averages and fiscal 1980-83 annual**

Fiscal year <sup>1</sup>	U.S. farm exports <sup>2</sup>		
	Total	CCC credit <sup>3</sup>	CCC share
	Million dollars		Percent
1963-64	234.3	8.1	3
1965-69	151.5	26.1	17
1970-74	343.5	75.1	22
1975-79	1,167.4	298.8	27
1980	2,281.3	642.9	28
1981	1,940.1	743.1	38
1982	920.6	0	0
1983	826.9	277.0	34

<sup>1</sup>July-June from 1963 to 1977, October-September from 1978. <sup>2</sup>Includes transshipments for fiscal 1976-1983. <sup>3</sup>Includes financing under the commercial segment of the Commodity Export Program only. <sup>4</sup>All credit was used in fiscal 1981, but a shipping extension for Polish and Romanian corn purchases was granted, resulting in \$49.1 million of corn being shipped in the first quarter of fiscal 1982. These shipments were recorded as exports in fiscal 1982.

Sources: Bureau of the Census, U.S. Dept. of Commerce; FAS/USDA.

to Eastern Europe. No credits were authorized for the region in fiscal 1982. Authorizations for fiscal 1983 were \$277 million and are currently \$233.5 million for fiscal 1984 (\$190 million to Yugoslavia and \$43.5 million to Hungary).

**Poland**—The CCC's Export Credit Sales Program was first used in Eastern Europe in fiscal 1963 by Poland. Up until Polish martial law, East European use of CCC credit was dominated by Poland—71 percent of the total credit extended to Eastern Europe. During fiscal 1963-83, CCC-financed exports accounted for around 54 percent of total U.S. agricultural exports to Poland. In fiscal 1981, CCC-financed exports accounted for 96 percent of Polish agricultural imports from the United States.

**Other East European countries**—CCC Commodity Export credit was opened up to all other East European countries in fiscal 1966. During their period of eligibility, from fiscal 1966 until the Trade Act of 1974, Bulgaria and the GDR never took part in the program, and Czechoslovakia used it only once. Although none of the other eligible countries have taken part to the extent that Poland has, both Romania and Yugoslavia have used CCC credit substantially, averaging 15 and 27 percent, respectively, of total U.S. agricultural exports to these two countries during fiscal 1963-83.

### Commodity Coverage

By far, the largest use of CCC financing in Eastern Europe has been for the purchase of grain (corn and wheat), soybeans and products, and cotton; these products made up at least 85 percent of total CCC-financed exports to Poland, Hungary, Romania, and Yugoslavia during fiscal 1963-83. Other commodities financed under CCC credit have included tallow, tobacco, cottonseed oil, linseed oil, alfalfa seed, butter, cottonseed meal, linseed meal, and vegetable oil.

Credit use in fiscal 1983, at \$277 million, included the purchase of U.S. cotton by Yugoslavia (\$59.5 million)



**Commodity composition of CCC credit-financed  
exports to Hungary, Poland, Romania, and  
Yugoslavia, fiscal 1963-83<sup>1</sup>**

Commodity	Hungary	Poland	Romania	Yugoslavia
	<i>Percent</i>			
Corn	0	45	43	7
Wheat	0	15	8	36
Soybeans and products <sup>2</sup>	85	23	25	28
Cotton	3	5	13	14
Other	12	12	11	15
Total	100	100	100	100

<sup>1</sup>Includes financing under the commercial segment of the Commodity Export Program only. <sup>2</sup>Includes soybeans, soybean meal, and soybean oil.

Sources: Bureau of the Census, U.S. Dept. of Commerce; FAS/USDA.

under the Blended Credit Program. Before this sale, cotton exports to Eastern Europe were very small. The fiscal 1984 credit authorization for Yugoslavia—\$190 million—is to be used to purchase vegetable oil (40 percent), cotton (31 percent), hides and skins (26 percent), and oilmeals (3 percent). The credit authorization for Hungary—at \$43.5 million—is made up of 80 percent oilmeals, 11 percent cotton, 5 percent protein isolates, and 4 percent other products.

### Problems with Repayment

In recent years, severe financial problems have plagued many East European countries. Poland and Romania have rescheduled CCC credit repayments, amounting to \$359 million and \$28.5 million, respectively. Repayments for Poland, which fell behind in April 1981, were rescheduled that year, but in fact, no payments have

been made since then. Rescheduling for Romania took place in early 1984. Of the amounts rescheduled, Poland and Romania were, as of January 1984, \$79.7 million and \$2.4 million, respectively, delinquent in interest payments. In addition to the amounts rescheduled, Poland and Romania were \$1.1 billion and \$11.4 million, respectively, in arrears as of January 1984. Hungary and Yugoslavia, while also experiencing financial difficulties, have managed to meet loan repayment schedules.

### Conclusion

U.S. agricultural sales to Eastern Europe increased from an average of \$234 million during fiscal 1963-64 to over \$2 billion in fiscal 1980. CCC credit increased from an average \$8.1 million during fiscal 1963-64 to over \$743 million in fiscal 1981. The market expansion goal of the Commodity Export Program credit had been successful in Eastern Europe, for it is unlikely that Poland, Romania, or Yugoslavia could have imported as much from the United States without CCC credit. In fact, when CCC credit was no longer made available to Poland, U.S. agricultural exports to that country dropped from \$700 million in fiscal 1981 to \$181 million in fiscal 1982.

While the Commodity Export Program has been beneficial for U.S. exports to the region, recent events now limit its use. Besides the problems in Poland and financial difficulties in the region, U.S. budgetary constraints and increased requests from more countries for CCC credit have reduced credit availability to Eastern Europe. Nonetheless, CCC credit will likely remain an important way to promote U.S. exports of products for which self-sufficiency cannot be obtained in Eastern Europe and for which competition from third-country suppliers is strong.

## The Private Sector in East European Agriculture

Nancy Cochrane

**Abstract:** The private sector in Eastern Europe presently produces a significant share of the food supplies; in Yugoslavia and Poland, it is responsible for well over half the agricultural production. Recognizing its importance, most governments have introduced measures encouraging private producers, often supplying essential inputs to farmers in return for deliveries to socialized organizations. There is, however, much variation in government commitment to private agriculture, and a marked exception to the trend is Romania, which has introduced several coercive measures.

**Keywords:** Private agriculture and farmers, household plots, private-socialized sector contracts, incentives and directives, legislation.

As socialized agriculture throughout Eastern Europe struggles with domestic investment shortfalls and constraints on imports, the production of private farmers is becoming more and more crucial in assuring adequate food supplies. The importance of the private sector lies in its potential for increasing production, thereby reducing reliance on imports without large increases in cost to the governments. In recognizing this, all governments except Romania are introducing measures to improve conditions for private farmers. Moreover, authorities in Yugoslavia and Poland, where the private sector is dom-

inant, have backed away somewhat from previous efforts to force socialization of agriculture. The degree of government support for private agriculture varies considerably, however, and socialized agriculture as a long-term goal remains a priority in Poland and Yugoslavia.

### The Nature of Private Agriculture

Except for Yugoslavia and Poland, where private (but small-sized) holdings predominate, the private agricultural sector in Eastern Europe consists of three types of



farms. One is household plots—usually half a hectare in size, but sometimes more under certain conditions. These plots are allocated to members of agricultural cooperatives and employees of state farms to be worked in their spare time. The second type of farm is the auxiliary farms of less than 1 hectare; these are allocated to industrial workers. Inheritance rights may accompany these allotments, but rights to the land continue only so long as the land is properly cultivated. Finally, in Romania, and to a slight degree in Hungary and Czechoslovakia, there are a few privately owned farms. These are usually restricted to mountainous regions and other areas unsuited for large-scale, socialized agriculture.

Private agriculture in Bulgaria, Czechoslovakia, the GDR, Hungary, and Romania accounts for a minority share of production and is intended to complement rather than supplant socialized agriculture. The private sector concentrates mainly on the more labor-intensive forms of production, which are less profitable for the socialized sector. Thus, private farmers produce a substantial share of fruit and vegetables—shares as high as 50 to 60 percent in Romania and Hungary. The private sector also owns a substantial share of the livestock—often 30 to 40 percent or more—and has similar shares in the production of meat, milk, and other livestock products. Private farmers in Hungary own more than half the poultry and hogs.

#### **Private Farmers Contract With Socialized Sector**

In all five countries where socialized agriculture dominates, private farmers are free to sell most of their production (but usually not meat or grain) either to state procurement organizations or to market it directly in farmers' markets. Farmers have preferred to sell their production directly to consumers because they can

receive better prices than what the state organizations pay. To counter this tendency, governments in all five countries are introducing incentives to encourage private producers to sign delivery contracts with socialized organizations.

In these contracts, private farmers commit themselves to deliver a given quantity of products to a state farm or cooperative in return for a price set in advance and improved access to essential inputs. Livestock fattening is a common form of contract. Cooperatives either give young animals to their members or provide credit on favorable terms for their purchase. The cooperatives also provide feed or, as in the case of Hungary, allot additional land to plot holders to grow their own feed. In return, the plot holders sell the fattened animal back to the cooperatives. Similar contracts are signed by private producers of fruit and vegetables. The cooperatives provide seed, fertilizer, and plant protection agents and sometimes help in cultivating the land. The farmers in turn sell a specified amount of the crop to the cooperative at contracted prices.

Other incentives for signing contracts with socialized organizations include tax exemption of the resulting income and bonuses for fulfilling the contract on time. In Bulgaria, for example, income from sales to the socialized sector is tax free, whereas income from private sales is taxed. In Czechoslovakia, income from the sale of production by part-time farmers is tax exempt.

The contract system as measured by state procurement is most successful in Hungary and Bulgaria. In Hungary, private producers provide 22 percent of the marketed production; their share in agricultural production is 31 percent. In Bulgaria, the private sector provides 27 percent of the meat and eggs marketed by the socialized sector and 12 percent of the milk. These two countries have gone the furthest in integrating private and socialized production.

**Private sector share, 1982**

Item	Bulgaria	Czechoslovakia	GDR	Hungary	Romania	Poland	Yugoslavia
<i>Percent</i>							
Agricultural land	13	7	6	12	15	76	78
Arable land	12	3	NA	14	13	76	82
Gross farm output	25	NA	NA	28	14	81	67
Wheat	3	2	NA	2	1	75	65
Corn	29	21	NA	17	25	37	82
Potatoes	51	12	NA	63	58	92	99
Sugar beets	0	0	NA	2	6	83	23
Vegetables	33	40	11	62	42	92	NA
Fruit	37	70	30	50	58	91	NA
Cattle inventory	21	4	4	21	38	77	91
Hog inventory	20	9	20	52	25	86	80
Poultry inventory	38	25	44	72	39	90	58
Meat	40	27	NA	54	45	28	68
Milk	21	NA	NA	28	61	86	92
Eggs	56	NA	NA	62	58	90	NA

NA = Not available.

Source: Statistical yearbooks of respective countries.



The contribution of private farmers to the socialized marketing system is less in Czechoslovakia, the GDR, and Romania. The main function of the private sector in Czechoslovakia and the GDR remains household self-supply. In Czechoslovakia, the private sector supplied 12 percent of the vegetables and only 1.8 percent of the animals for slaughter purchased by state organizations. State procurements of private sector production are also very low in Romania, where food shortages are serious and state-set farm prices are particularly unfavorable. The private sector in 1981 provided only 11 percent of the state supply of meat, 7 percent of the vegetables, and 6 percent of the eggs.

### ***Attitudes Toward Private Agriculture Vary***

While almost all countries encourage private production, commitment to the private sector varies considerably among the five countries. Hungary and Bulgaria have done the most to integrate the private sector into the agricultural system, whereas Czechoslovakia and the GDR have so far taken only token measures. In marked contrast to trends in other countries, Romania has introduced extremely severe measures intended to force private sector sales to socialized organizations.

Hungary has taken the most extensive measures to promote private or "small scale" production. In 1980, a law was passed allowing private farmers to purchase tractors up to 30 horsepower, and factories have begun production of small tractors suitable for private plots. Other measures have included rises in procurement prices, tax breaks, and easier terms on credit for animal, fodder, and machinery purchases.

In Bulgaria, private plot production forms an integral part of its program for regional self-sufficiency. As in Hungary, the socialized organizations are required to provide inputs and other aid to private producers, and regional production plans include the contribution of private plots.

Czechoslovakia and the GDR have given less support to the private sector. Both governments turned only reluctantly to the private sector once it became clear that socialized agriculture could not supply sufficient food. The socialized sector in both countries is supposed to provide aid to private producers. However, local managers of state farms and cooperatives in Czechoslovakia have been accused of ignoring government edicts to provide inputs to plot holders. There have also been complaints that land that could be allocated for fattening contracts is still lying unused. In the GDR, there seems to be a similar lack of support from cooperative management.

### ***Romania Adopts Coercive Measures***

In marked contrast to other Eastern European countries, the Romanian Government has recently introduced measures intended to force private farmers to contract with the socialized sector. As in other countries, the Romanians have provided incentives for such contracting, such as easier access to inputs, but at the same time they have taken measures to penalize farmers who do not contract. Plot holders are required to raise specific numbers of animals, depending on plot size and number of family members. Private slaughtering of animals is forbidden, and delivery quotas have been imposed: 1

sheep for up to 5 raised, 800 liters of milk per cow raised, 25 eggs per hen, and so forth.

If the farmers comply with these quotas, they will receive access to state-owned grazing land, loans, and the right to purchase specified amounts of fodder—15 kilograms of feed concentrate for each 100 liters of milk sold, for example.

Similar delivery quotas are in effect for fruit and vegetable growers. Failure to make the requisite deliveries means no access to inputs and land can even be confiscated if authorities deem it is not being used to its full potential.

### ***Private Sector Dominates in Yugoslavia and Poland***

In Yugoslavia and Poland, agricultural production is dominated by small, fragmented private farms covering 76 percent of the arable land in Poland and 82 percent in Yugoslavia in 1982. The maximum size of a private farm in Yugoslavia is 10 hectares (more in hilly, less fertile regions), but the average farm is only 3.2 hectares and can consist of as many as 9 separate plots. There is a 30- to 50-hectare maximum in Poland, but the average farm is slightly over 5 hectares, and 60 percent are less than 5 hectares. Private farms in Poland also tend to be fragmented.

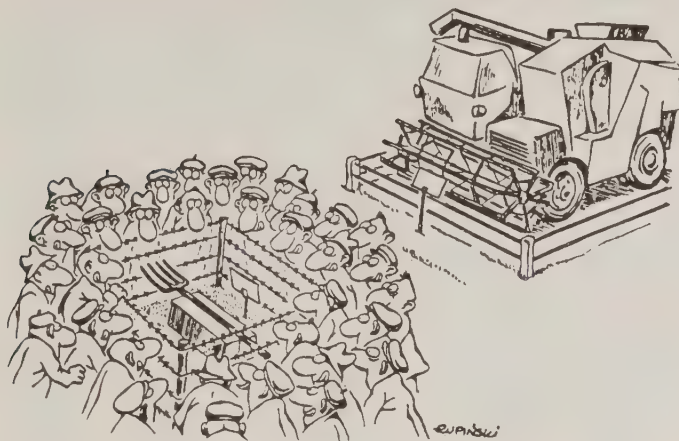
The private sector accounts for 67 percent of agricultural production in Yugoslavia and 81 percent in Poland. In both countries, the private sector owns the majority of the livestock and grows more than half of the crops. In Poland, only rapeseed is concentrated in the socialized sector, while in Yugoslavia, the socialized sector dominates in the production of sugar beets as well as oilseeds.

### ***Government Policies Favor Integration With Socialized Sector***

Until recently, Government policies in Yugoslavia and Poland have been aimed at expanding the share of the socialized sector in agricultural production. The resulting neglect of the private sector led to inadequate supplies of capital and inputs to private farmers in both countries. In 1982, private farmers in Poland had only a 57-percent share in capital investment, while those in Yugoslavia had a 52-percent share. The unavailability of machinery suitable for the private sector, including hand tools, has become a subject for satire in Poland. Yet, despite the economic disadvantage, private farmers in both countries have resisted government efforts to increase collectivization. Both Governments in recent years have reluctantly admitted that private agriculture will remain dominant for some time to come and have introduced measures to appease farmers and bolster production. Most such measures are aimed at promoting integration between the two sectors.

*Formation of cooperatives.* Policies being pursued in Yugoslavia and, to some extent, in Poland encourage the formation of cooperatives. These may be self-management organizations of private farmers for pooling land and machinery, or more often, they are marketing organizations. The governments encourage farmers to sign contracts with these marketing organizations, simi-





Popular commentary on the lack of hand tools for Poland's small private farmers who dominate the agricultural labor force.

Source: *Polityka*, Warsaw, July 30, 1983.

lar to those signed by private plot holders in the other countries. The Government in Yugoslavia has introduced several incentives for farmers to contract with cooperatives, such as credit on favorable terms and feed supplies. Farmers who cooperate will also be allowed to purchase land up to the maximum 10 hectares and to round off their holdings through the addition of adjacent land.

In both Yugoslavia and Poland, private farmers tend to be suspicious of such organizations. They feel that the State has too much control over their management. Private farmers in Yugoslavia also complain that the services provided by the cooperatives are inadequate, and that the terms of their contracts often work to the farmers' disadvantage. As a result, private farmer participation in these organizations is very low in both Yugoslavia and Poland.

*Increases in the maximum holding size.* An important issue in Yugoslavia is the 10-hectare maximum size of holdings. The inefficiency of such small holdings is widely recognized, and the Government may yet bow to pressure to raise the maximum. So far, it has resisted such

pleas. However, many of the republics have already raised the maximum in the hilly, less fertile regions; sometimes up to 100 hectares are permitted.

*Constitutional amendment in Poland.* Pressure from private farmers in Poland led in 1982 to a law guaranteeing the property rights of private farmers and allowing them to purchase land. However, farmers continued to demand more permanent guarantees of their status in the form of a constitutional amendment. In July 1983, such an amendment was passed. Authorities emphasize (*Gazeta Robotnica*, Jan. 29-30, 1983), however, that the further socialization of family agriculture remains the primary goal of Polish policy and that:

...its [the amendment's] intention is not to give some special preferential treatment to individual farming at the expense of the cooperative and state farms, but to create equal economic opportunities for all sectors of agriculture.

Despite this amendment, a disproportionate share of State investment is still going to the socialized sector. Thus it is unclear whether the amendment will even guarantee equal treatment.

The previously cited report further states that the State cannot now force decisions on socialization. But farmers "are free to make decisions about changes in ownership." One can perhaps expect measures to "encourage" private farmers to make such decisions.

### Prospects

While most East European countries are introducing measures to improve the conditions of private agriculture, such measures are uneven. Except in Yugoslavia and Poland, governments have made it clear that socialized agriculture is to remain dominant, and the ultimate goal in Yugoslavia and Poland remains the socialization of agriculture. So long as economic difficulties persist in Eastern Europe, the importance of private agriculture will continue. But the private sector will still play a role that is subordinate to that of socialized agriculture, and if economic situations should improve, government support may wane.

## EXPLANATORY NOTES

**Agricultural land:** Arable land (cultivated land, gardens, and orchards), meadows, and pastures.

**Agricultural trade:** Trade in food, live animals, and agricultural raw materials.

**Council for Mutual Economic Assistance (CEMA):** Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Mongolia, Poland, Romania, USSR, and Vietnam.

**Eastern Europe:** Northern countries—Czechoslovakia, the GDR, and Poland. Southern countries—Bulgaria, Hungary, Romania, and Yugoslavia.

**Transshipments:** U.S. exports destined for Eastern Europe and unloaded in Canada or Western Europe, but reported by the U.S. Bureau of the Census as exports to the port of entry.

### Metric units are used throughout:

One metric ton = 2,204.6 pounds  
One kilogram = 2.2046 pounds  
One hectare = 2.471 acres

**Cattlehides:** one piece = 22 kilograms  
**Milk:** one liter = 1.031 kilograms

Statistical data in this report are taken from the yearbooks of the respective countries and from the yearbooks of the Council for Mutual Economic Assistance. Other sources are noted as appropriate. Data on Albania are so scarce that Albania is not covered here.



**Table 1.—Production of grains, Eastern Europe, 1976-80 average and 1980-83 annual<sup>1</sup>**

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 tons</i>								
<b>Wheat</b>								
1976-80	3,513	4,949	2,998	5,181	5,089	6,104	5,306	33,140
1980	3,847	5,386	3,098	6,068	4,176	6,417	5,091	34,083
1981	4,443	4,325	2,942	4,602	4,203	5,295	4,270	30,080
1982	4,913	4,606	2,739	5,751	4,476	6,455	5,218	34,158
1983	3,600	5,825	3,550	5,961	5,165	4,900	5,520	34,521
<b>Rye</b>								
1976-80	20	578	1,748	133	6,474	(50)	87	(9,090)
1980	28	570	1,917	139	6,566	(50)	79	(9,349)
1981	34	544	1,797	115	6,731	(50)	75	(9,346)
1982	34	583	2,119	115	7,792	(50)	84	(10,777)
1983	20	750	2,060	136	8,780	40	85	11,871
<b>Barley</b>								
1976-80	1,532	3,386	3,715	769	3,560	1,981	664	15,607
1980	1,375	3,575	3,979	925	3,419	2,466	826	16,565
1981	1,406	3,392	3,476	899	3,540	2,571	720	16,004
1982	1,436	3,654	4,055	865	3,647	3,052	669	17,378
1983	1,100	3,275	3,900	1,007	3,260	1,800	670	15,012
<b>Oats</b>								
1976-80	70	423	525	85	2,434	56	298	3,891
1980	54	423	582	106	2,245	47	294	3,751
1981	62	433	598	159	2,731	65	311	4,359
1982	50	491	848	118	2,608	91	269	4,475
1983	50	475	500	118	2,380	70	255	3,848
<b>Corn</b>								
1976-80	2,652	724	2	6,347	165	11,097	9,192	30,179
1980	2,256	745	4	6,535	58	11,153	9,317	30,068
1981	2,401	706	3	6,813	65	11,892	9,807	31,687
1982	3,418	941	1	7,752	68	12,620	11,126	35,926
1983	3,300	715	—	6,215	70	11,100	10,690	32,090
<b>Rice</b>								
1976-80	62	—	—	31	—	48	34	175
1980	67	—	—	24	—	39	42	172
1981	74	—	—	39	—	49	42	204
1982	75	—	—	48	—	46	42	211
1983	65	—	—	42	—	70	45	222
<b>Other grains<sup>2</sup></b>								
1976-80	—	—	49	4	1,773	(47)	7	(1,880)
1980	—	—	46	3	1,872	(28)	5	(1,954)
1981	—	—	47	1	2,451	(23)	5	(2,527)
1982	—	—	259	—	2,575	(21)	4	(2,859)
1983	—	—	50	—	2,445	20	5	2,520
<b>Total grain</b>								
1976-80	7,849	10,060	9,037	12,550	19,495	19,383	15,588	93,962
1980	7,627	10,699	9,622	13,800	18,336	20,200	15,654	95,938
1981	8,420	9,400	8,863	12,628	19,721	19,945	15,230	94,207
1982	9,926	10,275	10,021	14,649	21,166	22,335	17,412	105,784
1983	8,135	11,040	10,060	13,479	22,100	(18,000)	17,270	(100,084)

— = No information reported, or amount under 1,000 tons. ( ) = Estimate. <sup>1</sup> 1983 data are preliminary. <sup>2</sup> Includes buckwheat, millet, spelt, mixed grains, and sorghum.



**Table 2.—Area of grains, Eastern Europe, 1976-80 average and 1980-83 annual<sup>1</sup>**

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 hectares</i>								
<b>Wheat</b>								
1976-80	938	1,229	720	1,274	1,735	2,256	1,616	9,768
1980	968	1,197	707	1,276	1,609	2,239	1,516	9,512
1981	1,032	1,090	675	1,151	1,418	2,101	1,386	8,853
1982	1,059	1,073	591	1,310	1,456	2,151	1,558	9,198
1983	900	1,190	755	1,355	1,540	2,220	1,610	9,570
<b>Rye</b>								
1976-80	15	186	645	81	2,997	(40)	64	(4,028)
1980	20	179	678	73	3,039	(40)	55	(4,084)
1981	27	171	656	74	3,002	(40)	54	(4,024)
1982	23	177	653	74	3,273	(35)	53	(4,288)
1983	20	200	680	72	3,450	(35)	50	(4,507)
<b>Barley</b>								
1976-80	485	919	981	237	1,288	662	298	4,870
1980	426	921	969	246	1,322	810	324	5,018
1981	382	996	964	286	1,294	917	310	5,149
1982	352	967	982	262	1,236	943	284	5,026
1983	330	825	930	277	1,110	750	280	4,502
<b>Oats</b>								
1976-80	49	162	157	35	1,067	52	215	1,737
1980	41	139	155	35	997	51	194	1,612
1981	46	160	172	55	1,156	62	194	1,845
1982	44	172	218	50	1,086	88	176	1,834
1983	40	160	170	40	1,040	50	170	1,670
<b>Corn</b>								
1976-80	657	202	—	1,297	41	3,295	2,256	7,748
1980	584	192	—	1,229	16	3,288	2,202	7,511
1981	563	178	1	1,163	16	3,327	2,297	7,545
1982	621	184	—	1,130	16	2,764	2,246	6,961
1983	730	165	—	1,098	15	3,275	2,260	7,543
<b>Rice</b>								
1976-80	17	—	—	23	—	21	8	69
1980	17	—	—	16	—	20	9	62
1981	16	—	—	13	—	20	9	58
1982	16	—	—	13	—	21	9	59
1983	20	—	—	15	—	30	5	70
<b>Other grains<sup>2</sup></b>								
1976-80	—	—	20	2	740	28	6	796
1980	—	—	16	1	864	21	4	906
1981	—	—	16	1	1,021	16	4	1,058
1982	—	—	71	1	1,027	15	4	1,118
1983	—	—	55	—	960	15	5	1,035
<b>Total grain</b>								
1976-80	2,160	2,699	2,524	2,949	7,868	6,353	4,462	29,015
1980	2,055	2,628	2,526	2,876	7,847	6,469	4,304	28,705
1981	2,066	2,595	2,485	2,743	7,907	6,483	4,254	28,533
1982	2,115	2,573	2,515	2,840	8,094	6,017	4,330	28,484
1983	2,040	2,540	2,590	3,017	8,115	6,375	4,380	29,057

— = No information reported, or amount under 1,000 hectares. ( ) = Estimate. <sup>1</sup>1983 data are preliminary. <sup>2</sup>Includes buckwheat, millet, spelt, mixed grains, and sorghum.



**Table 3.—Grain trade, Eastern Europe, 1976-80 average and 1980-82 annual**

Commodity and country	Imports				Exports			
	1976-80	1980	1981	1982	1976-80	1980	1981	1982
<i>1,000 tons</i>								
Wheat								
Bulgaria	124	30	60	—	326	509	319	1,018
Czechoslovakia	519	537	218	262	—	—	—	—
GDR <sup>2</sup>	953	476	794	731	59	50	75	75
Hungary	8	1	100	1	682	814	1,298	1,147
Poland	2,723	3,466	3,448	3,602	—	—	—	—
Romania <sup>1</sup>	687	807	1,160	315	971	704	200	240
Yugoslavia	630	1,347	424	765	18	5	50	1
Total	5,644	6,664	6,204	5,676	2,056	2,082	1,942	2,481
Barley								
Bulgaria	73	1	1	—	18	46	—	—
Czechoslovakia	126	169	20	—	59	34	18	20
GDR <sup>2</sup>	782	564	582	356	147	150	154	138
Hungary	130	84	45	<sup>1</sup> 1	8	22	23	22
Poland	1,410	1,130	879	144	16	—	—	—
Romania <sup>1</sup>	84	60	—	—	—	—	—	—
Yugoslavia	22	35	5	<sup>1</sup> 14	4	10	17	6
Total	2,627	2,043	1,532	515	252	262	212	186
Corn								
Bulgaria	367	653	953	<sup>1</sup> 390	84	90	54	—
Czechoslovakia	942	1,181	675	1,064	—	—	15	—
GDR	1,775	3,161	1,823	1,349	—	—	—	—
Hungary	116	30	9	<sup>1</sup> 1	330	83	123	438
Poland	1,985	2,553	2,465	413	—	—	—	—
Romania <sup>1</sup>	590	1,318	1,568	900	602	994	1,395	903
Yugoslavia	240	1	—	383	249	273	220	205
Total	6,015	8,897	7,493	4,500	1,265	1,440	1,807	1,546
Other grains <sup>1, 3</sup>								
Bulgaria	5	—	2	2	—	—	—	—
Czechoslovakia	14	20	9	50	4	3	24	15
GDR	342	220	97	132	170	240	141	133
Hungary	14	15	6	7	15	12	13	14
Poland	675	569	311	89	18	6	—	—
Romania	302	35	30	125	4	22	—	—
Yugoslavia	4	2	3	—	6	4	1	2
Total	1,356	861	458	405	217	287	179	164
Rice								
Bulgaria	7	8	—	<sup>1</sup> 5	1	6	4	—
Czechoslovakia	78	73	81	66	—	—	—	—
GDR	44	44	42	31	—	—	—	—
Hungary	23	23	19	13	—	—	—	—
Poland	87	93	115	81	—	—	—	—
Romania	56	57	56	65	—	—	5	4
Yugoslavia	17	32	35	31	—	—	—	—
Total	312	330	348	292	1	6	9	4
Total grains								
Bulgaria	576	692	1,016	397	429	651	377	1,018
Czechoslovakia	1,679	1,980	1,003	1,442	67	37	57	35
GDR	3,896	4,465	3,338	2,599	375	440	370	346
Hungary	291	153	179	23	1,036	931	1,457	1,621
Poland	6,880	7,811	7,218	4,329	34	6	—	—
Romania <sup>1</sup>	1,719	2,277	2,814	1,405	1,577	1,720	1,600	1,147
Yugoslavia	913	1,417	467	1,193	276	292	288	214
Total	15,954	18,795	16,035	11,388	3,794	4,077	4,149	4,381

— = No information reported, or amount less than 1,000 tons.

<sup>1</sup>FAO data for imports. <sup>2</sup>Trading partners data for exports only. <sup>3</sup>Rye, oats, and grain sorghum.



**Table 4.—Production of selected crops, Eastern Europe, 1976-80 average and 1980-83 annual<sup>1</sup>**

Commodity and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
<i>1,000 tons</i>								
Potatoes								
1976-80	370	3,678	9,873	1,194	42,742	4,431	2,705	64,993
1980	301	2,695	9,214	941	26,391	4,135	2,440	46,117
1981	403	3,743	10,378	1,112	42,562	4,447	2,774	65,419
1982	469	3,608	8,883	966	31,951	5,006	2,636	53,519
1983	470	3,105	7,000	800	34,475	5,630	2,590	54,070
Sugar beets								
1976-80	1,827	7,132	6,996	3,975	14,149	6,135	5,258	45,472
1980	1,414	7,255	7,034	3,927	10,139	5,562	5,213	40,544
1981	1,136	6,969	8,043	4,719	15,867	5,441	6,224	48,399
1982	1,583	8,210	7,193	5,370	15,085	6,647	5,671	49,759
1983	1,450	6,040	6,000	3,800	16,360	4,820	5,650	44,120
Sunflowerseed								
1976-80	392	17	—	298	—	821	433	1,961
1980	380	25	—	454	—	817	302	1,978
1981	457	33	—	624	—	810	327	2,251
1982	511	36	—	579	—	847	202	2,175
1983	505	38	—	600	—	705	140	1,988
Rapeseed								
1976-80	—	151	291	80	637	12	60	1,231
1980	—	214	308	98	572	19	68	1,279
1981	—	200	284	75	496	14	65	1,134
1982	—	178	307	85	433	13	79	1,095
1983	—	200	300	70	555	15	120	1,260
Soybeans								
1976-80	114	4	—	37	—	293	56	504
1980	107	6	—	37	—	448	34	632
1981	105	6	—	48	—	268	92	519
1982	116	6	—	60	—	301	198	681
1983	100	5	—	50	—	(300)	200	(655)
Tobacco								
1976-80	141	5	5	20	80	46	67	364
1980	120	5	4	14	56	37	57	293
1981	130	6	4	20	96	28	63	347
1982	145	6	5	24	96	33	77	386
1983	155	5	5	23	95	30	80	393
Corn silage								
1976-80	4,866	14,930	10,951	6,104	21,512	4,348	1,253	63,424
1980	4,498	14,647	11,434	6,613	18,000	3,688	1,460	60,340
1981	5,053	15,642	13,434	7,287	20,836	4,403	1,622	68,277
1982	5,969	18,813	10,408	7,086	14,398	7,945	1,803	68,422
Hay <sup>2</sup>								
1976-80	2,052	6,129	4,809	2,903	8,294	5,636	3,414	33,237
1980	2,080	7,169	6,113	3,128	8,089	5,312	3,378	35,269
1981	2,076	6,635	6,296	2,588	9,568	5,281	3,314	35,758
1982	2,182	6,451	5,079	2,674	8,166	6,300	3,120	33,972
Feed roots								
1976-80	690	870	2,401	692	9,055	3,605	749	18,062
1980	479	715	1,714	661	8,044	2,986	685	15,284
1981	431	795	2,721	645	11,722	3,276	675	20,265
1982	465	1,220	2,770	700	10,541	4,392	664	20,752

— = No information reported, or amount under 1,000 tons.

<sup>1</sup>1983 data are preliminary and unavailable for corn silage, hay, and feed roots. <sup>2</sup>Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.



**Table 5.—Area of selected crops, Eastern Europe, 1976-80 average and 1980-83 annual<sup>1</sup>**

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 hectares</i>								
Potatoes								
1976-80	35	223	566	84	2,410	291	301	3,910
1980	35	199	513	63	2,344	286	287	3,727
1981	37	200	505	61	2,257	299	291	3,650
1982	40	199	505	56	2,178	311	280	3,569
1983	40	193	500	60	2,230	310	280	3,613
Sugar beets								
1976-80	66	217	260	118	505	247	125	1,538
1980	56	218	250	104	460	238	128	1,454
1981	56	219	262	122	470	282	147	1,558
1982	61	213	255	125	493	269	140	1,556
1983	60	212	250	108	490	230	140	1,490
Sunflowerseed								
1976-80	233	13	—	185	—	515	214	1,160
1980	247	20	—	273	—	508	180	1,228
1981	260	19	—	302	—	506	196	1,283
1982	253	22	—	290	—	496	140	1,201
1983	255	22	—	290	—	480	80	1,127
Rapeseed								
1976-80	—	72	124	53	327	8	28	612
1980	—	91	125	51	320	14	32	633
1981	—	95	124	56	277	13	31	596
1982	—	97	120	60	259	14	45	600
1983	—	118	122	50	260	10	50	610
Soybeans								
1976-80	83	3	—	25	—	239	29	379
1980	94	1	—	20	—	364	17	496
1981	94	2	—	22	—	310	48	476
1982	69	3	—	26	—	269	75	442
1983	90	3	—	32	—	300	100	525
Tobacco								
1976-80	116	4	3	16	51	48	62	300
1980	108	4	3	14	52	44	57	282
1981	106	4	3	15	49	39	56	272
1982	103	4	3	15	49	35	65	274
1983	110	4	3	15	50	35	65	282
Corn silage								
1976-80	273	439	372	319	624	172	42	2,241
1980	360	418	365	329	668	44	49	2,233
1981	341	423	366	346	577	53	57	2,163
1982	291	460	374	302	485	(95)	61	(2,068)
Hay <sup>2</sup>								
1976-80	453	957	540	656	1,698	942	659	5,905
1980	469	998	604	635	1,692	704	660	5,762
1981	462	1,010	624	599	1,900	782	646	6,023
1982	483	1,004	598	588	1,851	(800)	623	(5,947)
Feed roots								
1976-80	14	21	55	20	258	85	35	488
1980	12	20	40	19	257	76	34	458
1981	11	17	60	19	273	90	34	504
1982	11	23	69	19	288	(100)	33	(543)

— = No information reported, or amount less than 1,000 hectares. () = Estimate.

<sup>1</sup>1983 data are preliminary and unavailable for corn silage, hay, and feed roots. <sup>2</sup>Does not include meadow hay, and includes only lucerne, clover, and vetch in Yugoslavia.



**Table 6.—Trade of selected agricultural commodities, Eastern Europe, 1976-80 average and 1980-82 annual**

Commodity and country	Imports				Exports			
	1976-80	1980	1981	1982	1976-80	1980	1981	1982
<i>1,000 tons</i>								
<b>Oilseeds<sup>1</sup></b>								
Bulgaria	9	6	27	—	22	15	13	13
Czechoslovakia	135	91	58	109	2	2	2	2
GDR	55	84	50	40	21	11	25	—
Hungary	8	15	11	7	86	107	92	150
Poland	143	279	108	99	51	—	—	—
Romania	(251)	(273)	(81)	(244)	4	2	2	—
Yugoslavia	163	233	275	219	16	8	1	2
Total	(764)	(981)	(610)	(718)	202	145	135	167
<b>Vegetable oil, edible</b>								
Bulgaria	1	2	1	6	16	13	18	26
Czechoslovakia	44	21	53	41	1	—	—	—
GDR	113	112	109	107	—	—	—	—
Hungary	14	9	11	8	58	95	134	198
Poland	78	104	61	125	57	7	6	3
Romania	9	20	16	2	122	86	82	107
Yugoslavia	52	81	116	79	14	17	5	5
Total	311	349	367	368	268	218	245	339
<b>Meat and meat products<sup>2</sup></b>								
Bulgaria	9	5	2	2	108	117	98	108
Czechoslovakia	26	31	21	26	32	54	72	76
GDR	24	31	23	63	133	122	131	126
Hungary	13	16	20	21	285	347	354	416
Poland	48	52	188	93	156	162	82	67
Romania	39	90	71	59	187	191	206	136
Yugoslavia	41	70	40	93	94	100	76	122
Total	200	295	365	357	995	1,093	1,019	1,051
<b>Sugar<sup>3</sup></b>								
Bulgaria	219	194	283	246	2	—	—	—
Czechoslovakia	88	92	101	129	210	260	215	151
GDR	209	188	277	204	82	94	108	(94)
Hungary	84	40	136	(1)	31	106	76	42
Poland	58	124	185	73	208	26	14	101
Romania	139	199	211	217	72	87	266	(271)
Yugoslavia	85	—	179	37	78	317	1	10
Total	882	837	1,372	(907)	683	890	680	(669)
<b>Tobacco</b>								
Bulgaria	7	12	14	20	69	73	67	65
Czechoslovakia	21	26	28	19	1	—	—	—
GDR	20	26	18	18	2	3	3	(3)
Hungary	7	7	8	7	1	3	5	2
Poland	12	23	24	11	9	9	3	5
Romania	1	—	—	—	7	3	4	(4)
Yugoslavia	4	7	7	8	24	25	22	25
Total	72	101	99	83	113	116	104	(104)
<b>Oilseed meal</b>								
Bulgaria	194	184	230	161	—	—	—	—
Czechoslovakia	643	753	722	767	20	17	—	1
GDR	949	943	1,030	1,273	3	4	1	5
Hungary	614	620	599	565	(1)	(3)	(6)	29
Poland	1,160	1,361	1,348	856	(5)	(3)	(1)	1
Romania	297	385	654	170	—	—	—	—
Yugoslavia	172	148	177	215	3	6	4	1
Total	4,029	4,394	4,760	4,007	(32)	(33)	(12)	37
<b>Cotton</b>								
Bulgaria	57	64	56	60	—	—	—	—
Czechoslovakia	109	114	109	126	—	—	—	—
GDR	90	99	86	105	—	—	—	—
Hungary	93	117	95	79	—	—	—	—
Poland	163	173	152	160	—	—	—	—
Romania	111	120	119	135	—	—	—	—
Yugoslavia	108	110	103	108	—	—	—	—
Total	731	797	720	773	—	—	—	—
<b>Hides and skins</b>								
Bulgaria	6	5	7	6	—	—	—	—
Czechoslovakia <sup>4</sup>	(52)	51	17	(21)	—	—	—	—
GDR	17	19	16	11	—	—	—	—
Hungary	31	31	27	30	—	—	—	—
Poland	42	43	31	50	—	—	—	—
Romania	44	43	50	29	—	—	—	—
Yugoslavia	27	30	29	25	—	—	—	—
Total	(219)	222	177	(172)	—	—	—	—

( ) = Estimate. — = No information reported, or less than 1,000 tons.

<sup>1</sup>Rapeseed, soybeans, and sunflowerseed. <sup>2</sup>Includes poultry meat. <sup>3</sup>Raw basis. <sup>4</sup>Converted from pieces to metric tons at 22 kilograms per piece.

Sources: Statistical yearbooks of respective countries, CEMA Yearbook, *FAO Trade Yearbook*, statistical yearbooks of trading partners.

**Table 7.—January livestock numbers, Eastern Europe, 1976-80 average and 1981-84 annual<sup>1</sup>**

Category and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
<i>1,000 head</i>								
<b>Cattle</b>								
1976-80	1,733	4,754	5,544	1,926	12,339	6,361	5,575	38,232
1981	1,796	5,002	5,723	1,918	11,337	6,485	5,474	37,735
1982	1,807	5,103	5,749	1,945	11,467	6,303	5,464	37,838
1983	1,783	5,131	5,690	1,922	11,022	6,246	5,351	37,145
1984	1,780	5,190	5,755	1,910	11,085	6,750	(5,295)	(37,765)
<b>Cows</b>								
1976-80	697	1,902	2,145	773	5,914	2,612	3,181	17,224
1981	702	1,902	2,138	765	5,666	2,670	3,086	16,929
1982	706	1,905	2,122	759	5,706	2,592	3,079	16,869
1983	703	1,899	2,125	751	5,686	2,565	3,050	16,779
1984	695	1,900	2,125	755	5,680	(2,800)	(3,045)	(17,000)
<b>Hogs</b>								
1976-80	3,669	7,240	11,683	7,805	20,219	9,997	7,513	68,126
1981	3,808	7,894	12,871	8,330	18,734	11,542	7,867	71,046
1982	3,844	7,302	12,869	8,300	19,081	12,464	8,431	72,291
1983	3,810	7,126	12,107	9,035	17,564	12,644	8,370	70,656
1984	3,770	7,070	12,840	9,835	15,850	14,375	(8,320)	(72,060)
<b>Sheep</b>								
1976-80	10,105	837	1,925	2,560	3,452	14,818	7,504	41,201
1981	10,433	910	2,038	3,090	3,490	15,865	7,384	43,210
1982	10,726	959	2,169	3,140	3,510	17,288	7,398	45,190
1983	10,761	990	2,198	3,183	3,678	16,921	7,452	45,183
1984	10,980	1,040	2,350	3,100	3,530	18,575	(7,570)	(47,145)
<b>Horses</b>								
1976-80	126	54	67	141	1,970	565	751	3,674
1981	120	45	70	120	1,780	555	573	3,263
1982	119	44	76	112	1,726	598	515	3,190
1983	119	44	81	111	1,617	610	505	3,087
1984	120	44	80	110	(1,575)	(620)	(495)	(3,044)
<b>Poultry</b>								
1976-80	39,989	44,871	49,102	63,002	86,259	90,858	59,752	433,833
1981	41,636	47,283	51,611	65,042	81,164	97,800	65,690	450,226
1982	40,563	47,388	54,392	67,496	71,281	109,244	67,408	457,772
1983	42,853	49,212	51,356	67,552	67,244	111,047	69,680	458,944
1984	43,080	50,980	53,170	(67,600)	(66,300)	(119,240)	(71,000)	(471,370)

( ) = Estimate.

<sup>1</sup>1984 data are preliminary.



**Table 8.—Production of principal livestock products, Eastern Europe, 1976-80 average and 1980-83 annual<sup>1</sup>**

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>1,000 tons</i>								
Beef and veal <sup>2</sup>								
1976-80	143	424	447	203	869	306	362	2,754
1980	154	436	431	203	846	304	360	2,734
1981	150	423	452	196	623	289	356	2,489
1982	162	424	441	205	799	(225)	376	(2,632)
1983	(160)	435	440	200	720	(210)	(365)	(2,530)
Mutton, lamb, and goat meat <sup>2</sup>								
1976-80	99	6	20	15	29	76	60	305
1980	104	6	21	17	20	78	59	305
1981	113	7	19	19	27	64	58	307
1982	111	8	19	17	27	68	60	310
1983	(115)	7	20	17	25	(70)	(60)	(314)
Pork <sup>2</sup>								
1976-80	349	803	1,198	922	1,728	876	798	6,674
1980	372	851	1,258	986	1,768	977	815	7,027
1981	380	888	1,358	991	1,384	1,008	844	6,853
1982	378	772	1,211	1,020	1,512	(895)	850	(6,638)
1983	(385)	825	1,250	1,130	1,350	(970)	(800)	(6,710)
Poultry meat <sup>2</sup>								
1976-80	149	159	137	328	374	363	250	1,760
1980	145	172	145	355	441	406	299	1,963
1981	147	170	149	367	455	422	286	1,996
1982	153	170	147	400	197	440	282	1,789
1983	(160)	175	150	405	205	(455)	(295)	(1,845)
Total meat <sup>2, 3</sup>								
1976-80	745	1,423	1,821	1,472	3,064	1,623	1,476	11,624
1980	781	1,498	1,899	1,566	3,141	1,769	1,519	12,173
1981	794	1,527	1,997	1,577	2,525	1,786	1,555	11,761
1982	807	1,413	1,837	1,647	2,580	1,635	1,577	11,496
1983	(825)	1,442	1,860	1,752	2,300	(1,705)	(1,520)	(11,404)
Milk <sup>4</sup>								
1976-80	1,653	5,629	8,155	2,283	16,805	4,164	4,136	42,825
1980	1,830	5,909	8,321	2,548	16,494	4,148	4,342	43,592
1981	1,900	5,918	8,202	2,680	15,341	3,601	4,484	42,126
1982	2,000	5,931	7,678	2,721	15,293	3,365	4,602	41,590
1983	(2,114)	6,495	8,200	2,745	15,920	3,630	(4,690)	(43,794)
<i>Million pieces</i>								
Eggs								
1976-80	2,163	4,690	5,287	4,475	8,523	6,583	4,117	35,838
1980	2,434	4,900	5,514	4,385	8,902	6,727	4,394	37,256
1981	2,431	4,968	5,670	4,394	8,816	7,017	4,427	37,723
1982	2,459	5,030	5,696	4,440	7,633	7,155	4,612	37,025
1983	2,640	5,230	5,710	4,480	7,600	7,250	(4,720)	37,630

( ) = Estimate.

<sup>1</sup>1983 data are preliminary. <sup>2</sup>Data include offal and edible slaughter fat, and live animal exports for slaughter. CEMA data except for Yugoslavia.<sup>3</sup>Data include horse and rabbit meat, CEMA data except for Yugoslavia. <sup>4</sup>Data include only cow milk for consumption in Romania, Yugoslavia, and Hungary. Data in the remaining countries include milk sucked by calves. In the GDR, milk production is given in 3.5 percent fat equivalent. One liter is equivalent to 1.031 kilograms.

**Table 9.—Per capita consumption of selected foods, Eastern Europe, 1975 and 1980-83<sup>1</sup>**

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania 2/	Yugo-slavia
<i>Kilograms</i>							
Total meat							
1975	58.0	81.1	77.8	68.5	70.3	45.7	48.3
1980	61.2	85.6	89.5	71.7	74.0	60.0	54.2
1981	66.6	86.6	90.7	73.0	65.0	—	54.7
1982	68.3	81.0	91.0	74.5	58.5	<sup>3</sup> 65.0	54.7
1983	(69.5)	80.5	(91.3)	(74.8)	57	<sup>3</sup> (65.0)	(55.0)
Eggs <sup>4</sup>							
1975	146	297	269	274	209	214	166
1980	204	316	289	317	222	270	190
1981	209	321	290	314	227	—	183
1982	220	324	288	307	200	270	—
1983	225	—	301	(320)	(208)	—	—
Vegetable oil							
1975	14.1	6.7	2.0	2.9	6.5	—	10.6
1980	14.8	7.2	1.6	4.2	7.0	—	11.3
1981	14.9	7.3	1.6	4.4	7.4	—	—
1982	15.0	6.9	1.8	(4.5)	5.9	—	—
Sugar							
1975	32.5	38.0	36.8	39.4	43.2	20.3	32.8
1980	34.7	37.5	40.6	37.9	41.4	28.2	36.6
1981	35.1	36.9	40.8	35.5	33.4	—	36.1
1982	35.0	41.0	44.0	38.0	41.7	—	—
Grain, in flour equivalent							
1975	162	108	95	118	120	189	183
1980	160	107	94	112	127	172	178
1981	159	109	93	110	128	180	179
1982	159	111	97	109	124	173	—
Vegetables							
1975	127	74	90	85	109	113	87
1980	125	66	94	80	101	140	97
1981	135	66	94	77	118	—	98
1982	147	69	96	75	107	170	—
Potatoes							
1975	23	96	142	67	173	96	66
1980	27	76	143	61	158	71	61
1981	30	80	140	59	155	—	59
1982	31	88	145	58	159	100	—

— = No information reported. ( ) = Estimate.

<sup>1</sup>1983 data are preliminary and listed if available. <sup>2</sup>*Revista Economica*, Dec. 29, 1978; *Lumea*, Oct. 30, 1981; Bucharest Domestic Service, Nov. 1, 1981; *Scinteia*, Nov. 29, 1981; unpublished official statistics. <sup>3</sup>Includes fish. <sup>4</sup>Numbers.



**Table 10.—Total and agricultural trade, Eastern Europe, 1976-83<sup>1</sup>**

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>Million dollars</i>								
Exports <sup>2</sup>								
1976	5,382	9,035	11,361	4,934	11,017	6,138	3,557	52,424
1977	6,351	10,302	12,024	5,832	12,265	6,979	5,256	59,009
1978	7,478	11,747	13,267	6,345	14,114	8,077	5,668	66,696
1979	8,869	13,197	15,063	7,938	16,249	9,724	6,605	77,645
1980	10,372	14,891	17,312	8,677	16,997	11,401	10,770	90,420
1981	10,748	14,876	18,967	8,712	13,249	12,610	10,929	90,091
1982	11,288	15,637	21,743	8,767	11,208	11,714	10,713	91,070
1983	12,260	17,030	(24,280)	8,720	12,450	(12,420)	(10,415)	(97,575)
Imports <sup>2</sup>								
1976	5,626	9,706	13,196	5,528	13,867	6,095	6,882	60,900
1977	6,393	11,187	14,334	6,523	14,616	7,018	9,633	69,704
1978	7,651	12,565	14,572	7,902	16,089	8,910	9,983	77,672
1979	8,514	14,262	16,214	8,674	17,584	10,915	13,240	89,403
1980	9,650	15,148	19,082	9,235	19,089	13,201	18,279	103,684
1981	10,854	14,658	20,059	9,128	15,476	12,458	15,817	98,450
1982	11,413	15,403	20,196	8,814	10,248	9,836	14,057	89,967
1983	12,320	16,850	(22,690)	8,385	11,335	(9,410)	(12,120)	(93,110)
Balance								
1976	-244	-671	-1,835	-594	-2,850	43	-2,325	-8,476
1977	-42	-885	-2,310	-691	-2,351	-39	-4,377	-10,695
1978	-173	-818	-1,305	-1,557	-1,975	-833	-4,315	-10,976
1979	355	-1,065	-1,151	-736	-1,335	-1,191	-6,635	-11,758
1980	722	-257	-1,770	-558	-2,092	-1,800	-7,509	-13,264
1981	-106	218	-1,092	-416	-2,227	152	-4,888	-8,359
1982	-125	234	1,547	-47	960	1,878	-3,344	1,103
1983	-60	180	(1,590)	335	1,115	(3,010)	(-1,705)	(4,465)
Agricultural exports <sup>3</sup>								
1976	955	339	331	1,453	978	929	617	5,602
1977	1,036	376	328	1,749	1,019	1,275	595	6,378
1978	1,059	438	411	1,785	1,078	1,273	712	6,756
1979	1,259	551	464	2,102	1,199	1,176	814	7,565
1980	1,436	688	554	1,990	1,107	1,374	1,074	8,223
1981	1,162	614	594	2,249	632	1,415	1,093	7,759
1982	1,295	684	477	2,233	766	1,135	1,232	7,822
Agricultural imports <sup>3</sup>								
1976	504	1,462	1,840	937	1,895	881	902	8,421
1977	447	1,634	1,871	1,155	2,040	778	1,132	9,057
1978	498	1,689	2,024	1,170	2,294	833	1,067	9,575
1979	593	2,159	2,223	1,211	2,505	1,127	1,519	11,367
1980	616	2,093	2,484	1,100	3,098	1,393	1,641	12,425
1981	730	1,904	2,174	1,044	3,065	1,493	1,477	11,887
1982	500	1,890	2,120	730	2,161	911	1,316	9,628
Agricultural trade balance								
1976	451	-1,123	-1,509	516	-917	48	-285	-2,819
1977	589	-1,258	-1,543	594	-1,021	497	-537	-2,679
1978	561	-1,251	-1,613	615	-1,216	440	-355	-2,819
1979	666	-1,638	-1,759	891	-1,306	49	-705	-3,802
1980	820	-1,405	-1,930	890	-1,991	-19	-567	-4,202
1981	432	-1,290	-1,580	1,205	-2,433	-78	-384	-4,128
1982	795	-1,206	-1,643	1,503	-1,395	224	-84	-1,806

( ) = Estimate.

<sup>1</sup>1983 data are preliminary and unavailable for agricultural trade. <sup>2</sup>United Nations data. <sup>3</sup>FAO data.

**Table 11.—U.S. total and agricultural trade with Eastern Europe, 1979-83**

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
<i>Million dollars</i>								
<b>Total exports</b>								
1979	56.2	295.5	388.0	80.6	804.3	510.5	773.1	2,908.2
1980	172.2	236.1	558.8	88.2	761.4	748.5	768.3	3,333.5
1981	264.4	97.2	344.4	77.5	684.1	548.8	657.0	2,673.4
1982	106.6	111.7	236.6	67.8	294.1	223.3	554.6	1,594.7
1983	65.4	72.4	147.5	109.8	320.4	185.7	603.9	1,505.1
<b>Total imports</b>								
1979	34.7	50.9	36.4	112.2	425.6	329.3	388.9	1,378.0
1980	24.9	65.9	43.4	107.5	418.4	312.2	446.3	1,418.6
1981	25.6	67.2	44.7	127.9	359.9	559.4	445.5	1,630.2
1982	25.1	61.5	51.8	133.2	212.9	339.1	355.9	1,179.5
1983	32.8	62.8	56.9	154.5	190.6	512.8	366.5	1,376.9
<b>Balance</b>								
1979	21.5	244.6	351.6	-31.6	378.7	181.2	384.2	1,530.2
1980	147.3	170.2	515.4	-19.3	343.0	436.3	322.0	1,914.9
1981	238.8	30.0	299.7	-50.4	324.2	-10.6	211.5	1,043.2
1982	81.5	50.2	184.8	-65.4	81.2	-115.8	198.7	415.2
1983	32.6	9.6	90.6	-44.7	129.8	-327.1	237.4	128.2
<b>Total agricul-tural exports</b>								
1979	41.0	272.3	370.6	27.5	669.4	346.6	324.3	2,051.7
1980	138.9	205.5	534.3	33.6	622.4	490.9	293.2	2,318.8
1981	203.6	73.0	333.0	12.9	596.4	413.3	148.8	1,781.0
1982	64.1	90.2	217.8	7.1	181.8	133.6	182.0	876.6
1983	37.1	36.5	139.5	58.1	205.5	118.1	304.2	899.0
<b>Direct agricul-tural exports</b>								
1979	41.0	257.9	337.1	24.5	651.4	336.5	284.4	1,932.8
1980	127.3	154.6	453.3	24.4	571.5	462.6	277.5	2,071.2
1981	197.3	58.2	284.2	12.9	592.9	368.4	137.9	1,651.8
1982	64.0	62.1	203.9	7.1	180.3	133.6	182.0	833.0
1983	37.1	21.2	130.9	58.1	205.0	118.1	268.1	838.5
<b>Transshipments</b>								
1979	0	14.4	33.5	3.0	18.0	10.1	39.9	118.9
1980	11.6	50.9	81.0	9.2	50.9	28.3	15.7	247.6
1981	6.3	14.8	48.8	0	3.5	44.9	10.9	129.2
1982	0.1	28.1	13.9	0	1.5	0	0	43.6
1983	0	15.3	8.6	0	0.5	0	36.1	60.5
<b>Total agricul-ural imports</b>								
1979	23.2	7.7	2.2	35.8	164.0	33.6	86.4	352.9
1980	17.4	10.4	2.8	30.6	155.7	30.5	63.6	311.0
1981	21.5	12.1	1.0	33.7	109.1	28.0	71.7	277.1
1982	21.7	13.5	2.4	33.1	69.3	18.7	69.0	227.7
1983	30.6	7.7	2.0	43.3	105.1	19.5	56.3	264.5
<b>Balance</b>								
1979	17.8	264.6	368.4	-8.3	505.4	313.0	237.9	1,698.8
1980	121.5	195.1	531.5	3.0	466.7	460.4	229.6	2,007.8
1981	182.1	60.9	332.0	-20.8	487.3	385.3	77.1	1,503.9
1982	42.4	76.7	215.4	-26.0	112.5	114.9	113.0	648.9
1983	6.5	28.8	137.5	14.8	100.4	98.6	247.9	634.5

Sources: Bureau of the Census, Dept. of Commerce; U.S. Export Sales, FAS/USDA.



**Table 12.—Volume and value of U.S. agricultural exports to Eastern Europe<sup>1</sup>, 1976-80 average and 1981-83 annual**

Commodity and country	Volume				Value			
	1976-80	1981	1982	1983	1976-80	1981	1982	1983
	<i>1,000 tons</i>				<i>Million dollars</i>			
<b>Total grain</b>								
Bulgaria	230	934	279	102	27.8	134.0	32.0	13.8
Czechoslovakia	723	412	435	54	97.2	52.2	57.3	6.9
GDR	2,074	1,796	1,504	891	265.9	271.7	176.2	112.3
Hungary	44	1	—	25	5.2	0.8	—	—
Poland	2,769	2,340	437	248	330.5	359.9	45.3	46.7
Romania	864	1,631	236	—	107.1	247.5	29.3	—
Yugoslavia	522	137	609	311	73.0	19.9	78.9	42.2
Total	7,226	7,251	3,500	1,631	906.7	1,086.0	419.0	221.9
<b>Wheat</b>								
Bulgaria	—	—	—	—	—	—	—	—
Czechoslovakia	165	—	—	—	28.9	—	—	—
GDR	294	174	108	—	45.7	34.2	16.6	—
Hungary	—	—	—	—	—	—	—	—
Poland	617	92	—	74	83.1	17.0	—	19.2
Romania	244	63	—	—	33.9	8.3	—	—
Yugoslavia	250	137	226	311	41.9	19.9	33.5	42.2
Total	1,570	466	334	385	233.5	79.4	50.1	61.4
<b>Corn</b>								
Bulgaria	240	934	279	102	27.8	134.0	32.0	13.8
Czechoslovakia	549	412	435	54	67.0	52.2	57.3	6.9
GDR	1,650	1,511	1,396	766	207.0	224.7	159.6	96.7
Hungary	21	—	—	—	2.4	—	—	—
Poland	1,840	2,233	437	162	212.1	335.4	45.3	22.1
Romania	544	1,568	236	—	66.1	238.4	29.3	—
Yugoslavia	254	—	383	—	29.4	—	45.4	—
Total	5,098	6,658	3,166	1,084	611.8	984.7	368.9	139.5
<b>Soybeans</b>								
Bulgaria	—	22	—	—	—	6.2	—	—
Czechoslovakia	6	—	13	—	4.4	—	3.1	—
GDR	5	1	—	—	1.2	0.2	—	—
Hungary	—	—	—	—	—	—	—	—
Poland	134	87	100	193	35.6	25.3	22.4	48.7
Romania	222	153	244	305	54.9	35.7	60.7	76.4
Yugoslavia	155	244	189	222	42.2	70.1	44.9	55.7
Total	522	507	546	720	138.3	137.5	131.1	180.8
<b>Vegetable oil</b>								
Bulgaria	—	—	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—	—	—
GDR	1	—	—	—	1.0	—	—	—
Hungary	—	—	—	—	—	—	—	—
Poland	15	12	12	11	8.8	7.3	8.8	8.1
Romania	—	—	—	—	—	—	—	—
Yugoslavia	4	7	16	132	2.4	3.8	8.4	54.7
Total	20	19	28	143	12.2	11.1	17.2	62.8
<b>Soybean meal and cake</b>								
Bulgaria	73	214	107	35	16.9	52.1	23.4	8.6
Czechoslovakia	281	36	85	76	56.7	8.3	18.8	15.3
GDR	345	208	172	79	75.7	58.4	39.0	17.4
Hungary	95	—	—	209	22.8	—	—	50.8
Poland	356	288	7	155	76.1	77.0	1.4	37.9
Romania	158	372	57	—	36.0	101.4	14.3	—
Yugoslavia	133	140	96	201	27.8	34.1	21.6	44.7
Total	1,441	1,258	524	755	312.0	331.3	118.5	174.7
<b>Cotton</b>								
Bulgaria	—	—	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—	—	—
GDR	—	—	2	—	—	—	—	—
Hungary	—	2	—	—	—	3.9	—	—
Poland	8	6	—	—	12.3	15.0	—	—
Romania	10	—	—	—	15.4	—	—	—
Yugoslavia	—	—	—	47	—	—	—	82.6
Total	18	8	2	47	27.7	18.9	—	82.6
<b>Cattle hides<sup>2</sup></b>								
Bulgaria	41	—	—	—	1.1	—	—	0.8
Czechoslovakia	589	334	415	500	15.2	8.5	10.1	13.6
GDR	33	—	—	—	0.7	—	—	—
Hungary	183	112	102	100	3.9	3.0	2.3	2.9
Poland	441	203	791	300	12.6	5.5	21.9	7.6
Romania	1,486	680	939	1,300	38.8	22.0	27.2	40.8
Yugoslavia	461	230	298	300	9.9	7.7	9.9	12.1
Total	3,234	1,559	2,545	2,500	82.2	46.7	71.4	77.8

Continued

**Table 12.—Volume and value of U.S. agricultural exports to Eastern Europe<sup>1</sup>,  
1976-80 average and 1981-83 annual—Continued**

Commodity and country	Volume				Value			
	1976-80	1981	1982	1983	1976-80	1981	1982	1983
	1,000 tons				Million dollars			
Other								
Bulgaria	—	—	—	—	4.9	11.3	8.7	13.9
Czechoslovakia	—	—	—	—	10.3	4.0	0.9	0.7
GDR	—	—	—	—	3.5	2.7	2.6	9.8
Hungary	—	—	—	—	4.6	5.2	4.8	4.4
Poland	—	—	—	—	42.6	106.4	82.0	56.5
Romania	—	—	—	—	5.8	6.7	2.1	0.9
Yugoslavia	—	—	—	—	26.6	13.2	18.3	12.2
Total	—	—	—	—	98.3	149.5	119.4	98.4
Total agricultural exports								
Bulgaria	—	—	—	—	50.7	203.6	64.1	37.1
Czechoslovakia	—	—	—	—	183.8	73.0	90.2	36.5
GDR	—	—	—	—	348.0	333.0	217.8	139.5
Hungary	—	—	—	—	36.5	12.9	7.1	58.1
Poland	—	—	—	—	518.5	596.4	181.8	205.5
Romania	—	—	—	—	258.0	413.3	133.6	118.1
Yugoslavia	—	—	—	—	181.9	148.8	182.0	304.2
Total	—	—	—	—	1,577.4	1,781.0	876.6	899.0

— = Amount less than 1,000 tons, \$1 million, or not applicable.

<sup>1</sup>Including estimated transshipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands. <sup>2</sup>1,000 pieces.

Sources: Bureau of the Census, Dept. of Commerce; *Foreign Agricultural Trade of the United States*, ERS/USDA; *U.S. Export Sales*, FAS/USDA.

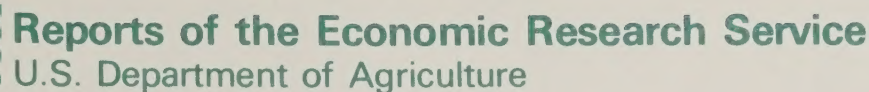
**Table 13.—Volume and value of U.S. agricultural imports from  
Eastern Europe, 1976-80 average and 1981-83 annual**

Commodity and country	1976-80	1981	1982	1983
	1,000 tons			
Processed meat				
Bulgaria	—	—	—	—
Czechoslovakia	1.1	1.6	1.6	0.6
GDR	—	—	—	—
Hungary	7.6	7.4	6.8	11.0
Poland	39.4	26.1	15.9	27.4
Romania	6.9	6.4	3.3	4.4
Yugoslavia	14.6	9.9	11.8	9.9
Total	69.6	51.4	39.4	53.3
	Million dollars			
Processed meat				
Bulgaria	0.04	0.10	—	—
Czechoslovakia	3.36	4.72	5.17	1.96
GDR	0.10	0.03	—	0.03
Hungary	23.71	25.35	23.96	32.50
Poland	131.33	90.04	58.23	86.80
Romania	18.92	17.00	8.34	9.68
Yugoslavia	47.18	33.84	41.80	27.95
Total	224.64	171.08	137.50	158.92
Other products				
Bulgaria	19.87	21.39	21.70	30.58
Czechoslovakia	3.38	7.37	8.37	5.74
GDR	2.00	0.85	2.47	1.97
Hungary	5.23	8.33	9.16	10.75
Poland	17.45	19.08	11.10	18.25
Romania	7.54	10.95	10.32	9.86
Yugoslavia	38.06	37.84	27.18	28.38
Total	93.53	105.81	90.30	105.53
Total				
Bulgaria	19.91	21.49	21.70	30.58
Czechoslovakia	6.74	12.09	13.54	7.70
GDR	2.10	0.88	2.47	2.00
Hungary	28.94	33.68	33.12	43.25
Poland	148.78	109.12	69.33	105.05
Romania	26.46	27.95	18.66	19.54
Yugoslavia	85.24	71.68	68.98	56.33
Total	318.17	276.89	227.80	264.45

— = Amount less than 1,000 tons, \$1 million, or not applicable.

Source: Bureau of the Census, U.S. Dept. of Commerce.





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